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DRUG & CHEMICAL MARKETS

ESTABLISHED IN SEPTEMBER 1914 AS "WEEKLY DRUG MARKETS"

D. O. HAYNES & Co. Publishers No. 3 PARK PLACE NEW YORK U. S. A.

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VOL. IV NEW YORK, AUGUST 14, 1918 No. 49

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Who Will Be the Revenue Moses?

A Federal license for each individual, firm or corporation in business for profit and a tax on gross sales or gross earnings, the percentage of such tax to be determined each year, would lead the Ways and Means Committee out of the wilderness of puzzling suggestions now before them, and offer a simple and business-like method of raising a large part of the $8,000,000,000 required for war revenue under the bill now being considered in Washington. Ever since this original, practical and easy solution of the problem was suggested by DRUG AND CHEMICAL MARKETS in the May 2, 1917, issue of this journal, business men have endorsed it in letters, associations have approved it by resolution, and responsible legislators have urged the system upon Congress.

There is an excellent reason for adopting the plan at this time. The tax would fall on all, is not excessive, and would return funds sufficient to make up the deficiency which is setting the Treasury department and leading congressmen by the ears. Even a nominal license of $3 a year would meet the requirements of the Government at this time. It is easily collected and there could be no dodgers. The problems that have arisen in connection with the income tax and the tax on excess profits are absent. No elaborate collection system is necessary. Under the license plan every individual, firm and corporation in business for profit would be registered in Washington and soon after the first of the year each licensed business should be required to report the total amount of its sales or earnings for the preceding year. Exempt those whose annual business is less than $5,000 and assess the remainder according to the gross amount of sales or earnings and the amount of revenue to be raised. Professional men and farmers should be included. Business would soon adjust itself to this expense just as it does for rent or insurance, and the amount would be so small as not to be a burden upon any one business and would be so distributed that all business concerns would pay their proportion and not evade taxes as many thousands of them are doing at the present time.

The plan is respectfully submitted to the Ways and Means Committee.

Year's Bark Sales at Amsterdam

The cinchona bark receipts at Amsterdam and the consumption of bark by the Bandoeng Quinine Factory in Java during 1917, according to the

official returns reported by the Amsterdam correspondent of DRUG AND CHEMICAL MARKETS, make valuable comparative figures for estimating the output of quinine this year. The correspondent also furnishes a table of the sales of bark and sulphate of quinine on the Amsterdam market during the last ten years. The amount sold between January and December, 1917, is given as 5,821,250 kilos of bark and 355,674 kilos of sulphate.

The crop report of the Government Cinchona Bark Estate, in Java, tells of the pests which threatened the production, but the various infections seem to be controlled without much difficulty. The shipments of pharmaceutical bark were less in 1917 than the year before owing to lack of cargo space and storage facilities. The 1917 crop of Ledgeriana and Hybride bark amounted to 732,845 kilos compared with 739,492 kilos in 1916; 69,771 kilos of Succirubra bark compared with 76,669 kilos in 1916; and 77,484 kilos of Robusta bark against 85,200 kilos in 1916. There were large reserve stocks in Java and in Amsterdam, some of which were sold at the drug auctions. There was little demand at the beginning of 1917, but as supplies decreased offerings moved more quickly.

Industrial Morale

The slacker and the profiteer are menaces more for the effect they have on morale than for direct results of what they do or do not do towards winning the war. "But Jones does it" is the glibest excuse. "Why don't they get after him" is the bitterest complaint. Neither excuses nor complaints are the stuff of which good morale is made.

The chemical industries are essential to the winning of the war, and by and large they are whole-heartedly behind the Government and doing a bit so great that it seems a miracle when we remember the size of these industries four years ago. We have shaken off the incubus of German influence. We have declared chemical independence. We have conquered great problems of crude supply and manufacturing technique. The American chemical industries are a new and a valuable economic asset and a war necessity to the nation.

It is, therefore, peculiarly unfortunate that two factors that may, if allowed to exert their influence, undermine the morale of these industries should have their origin in Washington. The use of so dire a chemical necessity as platinum for luxury purposes is the subject of much bitter criticism in chemical circles. The increasing difficulties of doing business in drugs and chemicals is discouraging alike to manufacturers and dealers.

The War Trade Board and the Bureau of Mines are both well informed on the uses of platinum in the manufacturing of the very foundation acids of thousands of chemical processes, and they also have full knowledge of the uses of this metal in the jewelry trade and of the substitutes that have been devised for it in dentistry. The chemical industries appreciate the peculiar difficulties that are raised by the foreign situation as it affects platinum, and they credit at their face value the assurances of future supplies; but the fact stares us in the face that the immediate supply is inadequate for essential needs and the use of the metal for utterly useless purposes is not checked.

Even more serious are the divers checks to doing business that are continually becoming more and more serious. That the war needs require vast quantities of our chemical and pharmaceutical products no one knows better than the men engaged in their manufacture. No complaint is made of the Government's control of basic products, but means ought to be sought to provide a reasonable surplus of goods for the use of open trade. The stricter the control, the more judgment must be used in alloting supplies for general industrial and pharmaceutical demands. This has been the experience of Great Britain. Unless our own Government heeds the warning of the British experience they may so weaken these essential industries that irreparable harm will be done. Government orders may keep the factories busy, but they do not take the jobber, the exporter, or the retailer into consideration. Nor do they furnish necessary chemical supplies to hundreds of other manufacturing plants.

Growing Scarcity of Drugs

The discussion before the British Pharmaceutical Society over the scarcity of drugs in London is of interest in New York as an indication of conditions that will soon confront the trade here. The cablegrams to DRUG AND CHEMICAL MARKETS from our London correspondent have referred to the growing difficulties of obtaining cargo space from the Far East, the higher freight rates, and the lack of labor in many countries for harvesting the crops and gathering crude drugs. The situation in Russia has made it impossible to obtain ergot and the London market is now dependent upon Spain and Portugal for its supplies.

There being few shipments from the Persian Gulf no new arrivals of asafetida have been reported for some time and the spot supplies are about exhausted. The price of colombo root is twelve times what it was before the war. Cascara sagrada is rapidly advancing. The cost of buchu leaves is prohibitive and galbanum is unobtainable. There is very little storax, hellebore, stramonium, uva ursi, scammony, Turkish opium or tragacanth, Bulgarian attar of roses or turmeric.

Sarsaparilla is too bulky to ship under the Government regulations limiting cargo space and the freights and insurance prohibit it. Druggists are paying four prices for jalap compared with prewar rates. That useful gum, benzoin, is bringing extravagant prices and every parcel that reaches the open market is quickly snatched up. Licorice root has jumped to fourteen times the price before the war. Balsam of tolu is being depleted rapidly. A similar situation prevails in New York on some of these drugs and consumers must find substitutes for the remainder at an early date or they will find the market bare of supplies. It may be possible to find limited lots in the possession of second hands, but if they rely on these sources they must pay the price exacted.

Shortage of Drugs in England

Situation, Which is Practically Duplicated in New York, Reviewed by Charles A. Hill

CHARLES ALEXANDER HILL, president of the British Pharmaceutical Society, in his address at the annual meeting of the society recently said that the shortage of drugs was serious. In some instances stocks are becoming dangerously low—in fact, are approaching exhaustion—and are not replaceable without Government assistance. Among the drugs referred to in the address were the following:

Asafetida—Almost a famine prevails in this article, as with most others from the Persian Gulf.

Colombo Root—There is at present a famine in this drug, and anything available would fetch more than twelve times the pre-war price.

Cascara Sagrada—Stocks have steadily diminished, and the price is steadily advancing.

Ergot—Little is coming in from Russia, and the market is now dependent on Spain and Portugal.

Galbanum—Is now unobtainable.

Licorice Root—The present price is fourteen times as great as the pre-war price, and the quality is very inferior.

Balsam of Tolu—The shipping difficulty is answerable for the scarcity.

Benzoin—Every parcel which arrives realizes extravagant prices.

Buchu Leaves—The prices realized are exorbitant.

Jalap—Owing to the scarcity prices have quadrupled since the war.

Sarsaparilla—Owing to its bulky nature shipping space can seldom be secured.

Turmeric—The market is bare of all grades.

The following drugs from enemy countries are now unobtainable:

Storax, Hellebore, Austrian Stramonium, Uva Ursi, Scammony, Turkish Opium, Turkish Tragacanth, Bulgarian Attar of Roses.

Mr. Hill said: "Fortunately, the cultivation of certain drugs in this country has furnished adequate supplies; these drugs are colchicum, digitalis, poppy heads, belladonna and henbane."

Referring to the scarcity of saccharin, the president said that as the article was controlled by the Government there was no safety valve such as would be provided by the law of supply and demand in the form of an increased price.

Other drugs mentioned by Mr. Hill are the following:

Acacia Gum—Parcels from the Sudan have been coming forward fairly well, and prices have not risen to any extent.

Areca Nuts—Very scarce and dear. There are believed to be plentiful stocks on the other side but permission to ship has been refused.

Chamomiles—In the absence of Belgian supplies we have had to fall back on the French growers who have increased their ideas of value accordingly.

Cannabis Indica—Owing to the action of the Indian Government Bombay tops are getting very scarce, but fair quantities of really good samples from the Cape are forthcoming which relieve the situation and answer well for some unofficial purposes.

Cardamoms—In the absence of Continental buyers sales are difficult and prices rule normal.

Cinchona—Owing to small shipments prices here have gradually advanced.

Colocynth—The old Levant or Turkey colocynth is now never met with, but sufficient Egyptian and Spanish comes to hand to meet all requirements.

Gentian—The pre-war supplies were principally of Austrian origin. Spanish and French roots are now available, but at very high prices.

Myrrh—This is a Persian Gulf article and very scarce.

Rhubarb—Although acute shortage has frequently been threatened stocks have been just about sufficient to meet requirements.

Senna Leaves and Pods—Alexandrian: An acute shortage of both leaves and pods existed for some time, but the position has since improved. Tinnevelly: There are considerable stocks in this country, but the quality is not desirable.

Mr. Hill dealt, also, with the manufacture of the synthetic chemicals which before the war came chiefly from Germany. He said:

"Despite war conditions some progress has been made, and two facts of primary importance do seem at length to have been realized: (1) That one cannot expect to build up in a short time and under war conditions an industry which it has taken Germany's resources two generations to develop; (2) that this industry is dependent on the dye industry. In the latter industry there are necessarily produced in large quantities a number of chemicals known in the trade as 'intermediates.' These 'intermediates' are starting points or stepping stones in the manufacture of synthetic drugs.

"The fine chemical industry must go hand in hand with the dye industry, and be worked systematically and on a large scale if it is to be made a national industry which can overtake the enormous start that Germany has. If the fine chemical industry is to be developed on a scale anything like commensurate with its importance (and it must be borne in mind that it is a key industry, and therefore of paramount importance to the general development of national industry), Government assistance at the conclusion of hostilities will for a time be absolutely essential.

"The freight and insurance question has been the ruling factor in the shortage of supply, an illustration used being that of a consignment of Mexican scammony-root, valued at £1,000, f. o. b., upon which the freight and charges were £1,800.

"Consideration of the national food supply has resulted in pharmacy being deprived of edible fats and oils, most of these being required for the manufacture of margarine.

"Lard has practically disappeared from pharmacy, and one must assume for the period of the war, the whole supply being taken by the Government for food purposes. It is interesting to compare the official uses of lard in the B. P. 1914 (as published) with those of the B. P. 1867, compiled when medicinal paraffins had not been introduced. In the 1867 volume we find thirty-four ointments, of which twenty-eight were directed to be made with a lard basis and six with wax and oils. In the 1914 edition there were forty-three ointments; the formulae of twenty-five of these have lard as a basis, while the remaining eighteen are chiefly paraffin-base ointments.

"Olive oil, so far as regards the higher grades as used for edible purposes, is no longer an article of commerce in pharmacy, but the ordinary grades are available for pharmaceutical manufacturing, though supplies have to be supplemented by other oils, notably sesame or gin-

gelly-seed oil. Olive oil soaps seem to be no longer imported, so that sapo dur., B. P., is unobtainable; and while supplies of B. P. soft soap have not failed altogether, commercial soft soap as used for general domestic purposes is made from fish oils, which fact explains why occasionally everything in the home smells and tastes 'fishy.'

"Linseed oil is still available.

"Castor oil—The position here is that none is available for medicinal purposes, except the product known as 'neutralized seconds.' Which of us ten years ago would have believed that such an important and everyday drug as medicinal castor oil would have become in our time unobtainable?

"In place of the foregoing glycerides there are available for the manufacture of the ointments, liniments, plasters, and other preparations affected, lanolin—now a British product—and hard, soft and liquid paraffins."

DRUGS SCARCE IN NEW YORK

A leading New York dealer, who read the list of drugs mentioned by Charles Alexander Hill as being scarce in England, said the same drugs are scarce in New York. He added:

"The main question which is arousing the greatest interest is whether or not the supply which can be realized from domestic production can keep pace with the increasing demand sufficiently to permit the articles to sell at reasonable prices. Here in this country it is impossible to produce all of the botanical products, but the fact remains that poppy heads, belladonna and henbane are all grown here.

"There are a couple more items which we might add to the English list. In each case the scarcity is directly traceable to difficulties and uncertainties in transportation facilities. For instance, St. Vincent arrowroot has been increasingly scarce, owing to the embargo placed on its importation into this country. Kola nuts are also scarce, due primarily to transportation."

CHEMICAL WARFARE SERVICE PLAN

A recent executive order of the President places the experiment station at American University under the control of the War Department and directs that the Gas Service of the Army be organized into a Chemical Warfare Service of the National Army. By this decree, every function and power connected with the investigation, manufacture and production of toxic gases and gas-defense appliances is transferred from the jurisdiction of the Medical and Ordnance Departments to the jurisdiction of the Director of the Chemical Warfare Service. The head of the new bureau is known as the Director of the Chemical Warfare Service, and William L. Sibert, United States Army, is relieved from duty as Director of the Gas Service and detailed to this position.

This order is to remain in full force during the war and for six months after the treaty of peace.

SULPHUR IN RUBBER MANUFACTURE

Sulphur is as necessary today in the production of rubber goods as is rubber itself. Generally speaking, dry heat goods, such as clothing and footwear contain three per cent; mechanical goods and sundries, six to ten per cent, and hard rubber twenty to forty per cent of sulphur, says the "India Rubber World." If seven per cent were taken as an average, 350,000,000 pounds of crude rubber would call for 24,500,000 pounds of sulphur. Nor should it be forgotten that 300,000,000 pounds of reclaimed rubber call for an additional three per cent or 9,000,000 pounds. Thus, the sulphur needed for this year is estimated at 33,500,000 pounds. With foreign supplies cut off and with the possibility that munitions will demand much of that which is now being produced, the question is—what is in sight?

TESTS OF INDIA'S DYESTUFFS

Dr. Marsden's Report on Experiments with Annatto, Turmeric, Cutch, Divi Divi, Myrobalans and Chay Root—Duller Than Shades Obtained with Synthetic Dyes

Dr. Marsden, of the Indian Institute of Science, Bangalore, has now completed his examination of indigenous dyestuffs. Of the 37 varieties tested only ten have been found to be of any practical value in cotton dyeing.

For red shades—Chay root (chayaver, siruver, irumbal); nuna root (suranji, togari); mang-kudu; vembadam bark (surool pattai, paplichukkai) and munjeet.

For orange or yellow—Annatto (Javira) and turmeric.

For brown—Cutch, divi-divi and myrobalans.

For black—Divi-divi and myrobalans.

Dr. Marsden states that many of the dyeings produced are not beautiful, and in every case they are duller than similar shades obtained with synthetic dyes.

Chay root, nuna root, mang-kudu and munjeet only give red shades if the cotton is impregnated with alum salts either as alum or by using kasa leaves, says the London "Dyer and Calico Printer." The best shades are obtained by giving a preliminary oil treatment as in Madura red dyeing, this treatment having originated in India. After oiling, the yarn may be immersed in alum solution, dried and rinsed before dyeing, or may be placed directly in a mixture of the washed and ground roots and kasa leaf, left to steep overnight, and the dyeing finished by boiling.

Vembadam bark upon alum mordant gives a shade which is neither bright nor fast. To dye it the yarn should be soaked in a decoction of myrobalans (some 30 lb. per 100 gallons of water), wrung, and worked in a lime bath to fix the tannin, and then, after rinsing, worked in a solution of alum. The yarn thus mordanted is dyed at the boil with the vembadam bark and rinsed.

Annatto and turmeric are both easy to dye, and although the shades are not distinguished for fastness, they are both very bright. For annatto dyeing, the fresh seeds should, if possible, be used, and the pulp removed by pounding in water, which then serves as the dye-bath. If dry seeds only are available these are well shaken with warm water until all dye is removed, and then, a little soda being added, the yarn is entered and worked in the warm bath for half an hour. After wringing, it is treated with a little acid (say, lime juice) and dried.

One of the fastest shades which can be produced with natural dyestuffs is the brown shade with cutch. In dyeing, 10 to 15 lb. of cutch per 100 lb. of cotton is dissolved in water (15 to 20 times the weight of the yarn), and 1 part sulphate of copper per 100 of yarn is added to the bath. The yarn is boiled for from three-fourths to one hour. It is then lifted and wrung and worked warm in a bath of bichromate of potash (2 lb. per 100 gallons) for half an hour, then rinsed and dried.

The general use of myrobalans and other tannin materials is for the production of black, and a full black can be obtained by working the yarn in a hot decoction of, say, 25 to 30 lb. of myrobalans per 100 gallons of water, steeping the yarn until cold and then, after wringing, working in a lime bath (1 lb. freshly burnt lime for every 25 gallons of water) to fix the tannin. A thorough rinsing is now absolutely necessary to remove all excess of lime, and the yarn is then ready for the iron treatment. For this, 4 lb. of sulphate of iron (green copperas) are dissolved in 10 gallons cold water, a portion (say half) is added to the fixing bath, and the rest added from time to time to keep the bath up to strength while successive portions of yarn are being fixed. The black should develop rapidly upon removal of the yarn from the bath and wringing; if it does not, more of the sulphate of iron solution should be added.

INVESTIGATE BRITISH WAR COMPANY NOW STARTING WORK IN UNITED STATES

Government Officials in England Said to Have Obtained Monopoly for Cellulose Company—Huge Profit In American Subsidiary

The American Cellulose and Chemical Manufacturing Company, which has recently been negotiating with the Chamber of Commerce of Cumberland, Md., and the Cumberland Development Company for a site for a plant to cost $5,000,000 to $10,000,000, is the American end of the British Cellulose Company, now under investigation by the British Government. The American company has offices in New York City. It is said to be financed by the Vickers Company of London and is to manufacture a product used for airplane wings and other purposes. Cellulose acetate is said to be the principal ingredient.

The British investigation was started after the publication of a series of articles in the "London Chronicle" in which it was alleged that public officials were benefitting by a monopoly. As a result a committee of three, consisting of a Judge, Lord Sumner, and two business men, Lords Inchcape and Cowyn, was appointed to inquire into the formation and financial arrangements of the British Cellulose Company and its relations with departments of the Government.

According to a report by a select Committee on Expenditure of the British Government the Ministry of Munitions granted a monopoly to a group of men having important political and other connections, among them being Professor John Cadman, Sir Sam Hughes, Colonel C. G. Bryan, appointed Director of Propaganda in America under the present Ministry of Information; Colonel Grant Morden, a Canadian financier, who is a prospective candidate for Parliament; Sir Trevor Dawson, Chairman of Vickers, and Eric Long, son of Walter Long, Colonial Minister.

Alternative sources of supply were deliberately rejected, it is alleged, and the favored firm was suffered to indulge in a vast scheme of works construction, which was to be paid for ultimately out of the public funds, and for the most of which there was no proper authorization.

These privileges were extended to this firm, although it failed to keep its promises as to both the time and quantity of the output, it is said, and although its product is pronounced by a section of official experts to be unsatisfactory in quality and markedly inferior to the product of a rival French firm, whose services the Ministry of Munitions rejected.

On the other hand, a number of persons concerned in the parent company have seen their original six-penny shares converted into a profit of 5,700 per cent.

In this connection the "London Chronicle" said in a recent article:

"The first benefit which accrued to the promoters of the British Cellulose Company after the very exceptional terms which they obtained from the British Government, including a monopoly of the supply, was a very profitable American promotion. They founded the American Cellulose and Chemical Manufacturing Company, with a capital of $25,000,000, divided into $10,000,000 cumulative 7 per cent preferred stock and $15,000,000 common stock. The board at present consists of Colonel Grant Morden, Chairman; Sir Trevor Dawson, Dr. Camile Dreyfus, Henry Dreyfus, and E. E. Boreham of New York. The whole of the ordinary shares were issued as fully paid to the vendor.

"The company obtained a contract from the American Government for the supply of 750 tons of cellulose acetate at a price of $4 a pound, which is an exceptionally satisfactory price. They will get a much larger contract when their buildings and plant are erected. They have been equally fortunate in their arrangements with the American Government with regard to taxation in obtaining authority to write off 70 per cent of their capital expenditure before they become liable to taxation. The works are now being erected in America.

"In the meantime the company made their issue in London. They invited subscriptions for 1,000,000 preference stock, with the proviso that each subscriber will get an equivalent amount of fully paid stock, which means that they will get 2,000,000 of preferred stock for the price of one. The issue was oversubscribed.

"With regard to the ordinary shares, they have been alloted to the vendors as fully paid. Thus we find that in this American promotion the founders obtain $15,000,000, or in its English equivalent over £3,000,000. There is also a presentation to preferred shareholders of over £200,000, so that there is a total of £3,200,000 watered capital."

Hector B. Roy, of the American Cellulose & Chemical Manufacturing Company, Ltd., arrived at Cumberland, Md., August 12, to meet representatives of the George A. Fuller Company, contractor, regarding the plant to be built there, the first unit to be completed in four months. Mr. Roy turned over to the contractor plans and specifications for the building, work on which is to start this week.

It will be a much larger undertaking than first contemplated and will involve an expenditure of $15,000,000. It will take three years to construct the entire plant, which will duplicate the one in operation at Derby, England, which is said to have cost $34,000,000 and employs 11,000 operatives.

SULPHUR IN COAL MINE WASTE

War time has put sulphur at a premium, and the steadily increasing output of high explosives causes a heavy demand for the product. At a recent Senate hearing on the sulphur situation, the weight of opinion was that the nation's best reliance for further domestic supplies was in iron pyrites, called "brasses" by coal miners.

These "brasses" are chunks of iron sulphide with impurities of the coal and of rock. They occur in quantity through many of the deposits of coal, and are thrown on the coal dust dumps where they often take fire by oxidation.

The problem of separating the sulphur from the "brasses" appears to have been solved by S. W. Young, professor of chemistry in Leland Stanford University. His "thiogen" process is to bake the "brasses" in a special type of furnace and pass the gas given off into a reaction chamber, where, in the presence of a catalytic reagent, the sulphur is deposited. The estimated cost of recovering sulphur by this process is $8 a ton.

NON-ESSENTIALS TO BE LIMITED

Chairman Baruch of the War Industries Board says the country must prepare to deprive itself of all non-essential manufactures. This is necessary he pointed out if the available man power, raw materials and other manufacturing factors are to be diverted to war production.

In reviewing steps taken by the War Industries Board for the meeting of war demands he declared that coal and steel stocks of all less essential manufactures probably will be seized by the government if the necessity arises. The opinion is held that a large part of the steel and coal saved by the people by conservation has been absorbed by manufactures of this class. Commandeering action by the government he continued, would be taken if it is found that conservation purposes have been defeated by hoarding of the materials.

A big experimental plant for producing picric acid is being built in Washington by the Ordnance Department. Here a practical test of a new method of producing the acid, said to save in cost, will be tried.

WHOLESALE DRUGGISTS DENY CHARGES

Answer Filed in Suit by Federal Trade Commission Alleging Price Fixing and Restraint of Trade—Hearing Postponed Until September

The National Wholesale Druggists' Association, through its attorneys, has filed an answer to the charges of the Federal Trade Commission in which the Association was held to "have wrongfully and unlawfully engaged in a combination among themselves with the intent, purpose and effect of discouraging, stifling and suppressing competition in interstate commerce in the wholesale drug trade of the United States." It was further charged that the combination was to induce or compel manufacturers of drugs and druggists sundries not to sell to other than so-called legitimate wholesalers and jobbers.

In answer, the Association denies that the number of its members amounts to as much as 75 per cent. of the manufacturers of the country; it also denies that discrimination against other than so-called "legitimate jobbers" is made. After the Indianapolis decree of 1907 in which the alleged illegal combination to enforce such methods of doing business was enjoined, the Association, it states, radically changed its policy and proceeded to carry out the provisions of the decree not only in letter but in spirit. It discontinued any effort which directly or indirectly might amount to compulsion on manufacturers or its members, or on wholesale druggists who were not members. No restraint or boycott or even that intangible form of boycott which consists merely in censure or disfavor has existed in any degree since the Indianapolis decree.

Since then the members of the Association have not only competed with wholesale druggists who are not in the Association, but have competed with each other. No pressure has been brought to bear in behalf of the Association upon manufacturers as to the prices which they shall charge for articles manufactured by them, nor as to price maintenance or discounts. Each manufacturer is free to sell how and to whom he pleases. He may deal with wholesalers who are not members of the Association and is not thereby prejudiced in his dealings with wholesalers who are members of the Association.

The answer further says it is interesting to note that there are some 250 druggist wholesalers in the United States, of whom 212 are members of the National Wholesale Druggists' Association. If there is a demand for a certain article on the part of the public, it is the business of the wholesaler to ascertain the extent of the demand in his neighborhood and to supply the retailers with the goods in sufficient quantities. It is, naturally, the aim of the manufacturer to have his product as widely distributed as possible and to secure the co-operation of the wholesaler in supplying it. If the manufacturer deals with a wholesaler who does not treat him fairly in distribution, he will, of course discontinue sales to this wholesaler and continue to make them to those who do treat him fairly and who make the widest possible distribution of his goods.

The hearing has been postponed to a date in September to be announced later.

At the request of the Secretary of War and the Secretary of the Navy, the National Research Council has named a new committee to make a survey and study of explosives. At the head of the committee is Dr. Charles E. Munroe, dean of the faculty of graduate studies of George Washington University. As officially defined the work of the committee is "to survey the investigations on explosives now under way and to communicate to the proper military and naval authorities all information in regard to such investigations."

WOMEN WANTED IN CHEMICAL WORKS

Washington, D. C., Aug. 14—Opportunities for women in the chemical industry have been under investigation by the Women in Industry Service of the Department of Labor, which has just made public the tentative findings of the preliminary survey made of the chemical industries at Niagara Falls.

A committee representing a number of Government departments went to Niagara Falls in response to an invitation from the employers' association there. The manufacturers working on war contracts wished to introduce women in great numbers into employment which they have not previously entered.

Technical experts on the committee have made a quick survey of the processes in order to discover how, if possible, the industry might be made suitable for the employment of women. It will make a continuous observation of conditions in this industry, assisting the individual manufacturers in so arranging their processes that conditions of employment of women will be improved.

G. SIEGLE COMPANY PLANT SEIZED

Seizure of four enemy-owned corporations with a total capitalization in excess of $2,000,000 was announced last week by A. Mitchell Palmer, alien property custodian. The companies will be sold under the supervision of Joseph F. Guffey, sales manager, at public auction and with the approval of the advisory committee. They are:

The G. Siegle Company, of Rosebank, S. I., manufacturers and importers of colors and chemicals, organized here on April 4, 1904, with a capital stock of $250,000, all owned by the G. Siegle Company of Stuttgart, Germany.

George Benda, of Boonton, N. J., manufacturer of bronze powders, a branch of the concern of the same name in Fuerth, Bavaria, established in 1824; business here conducted by Adolph Neubauer, on behalf of himself and partner, Eugene Kirschbaum, now in Germany. When the war began Neubauer also went to Germany, and since 1916 no communication has been had with either of them by their local agents.

A. W. Faber, of Newark, N. J., manufacturers of lead pencils and stationers' supplies, trade name of a business which has been in existence since 1761, with its principal office at Stein, Bavaria, owned by Alexander, Count of Faber-Castell, and his wife Otillie, Countess of Faber-Castell, resident of Stein, Bavaria.

The Berger & Wirth Company, Brooklyn, manufacturers of printers' and lithographers' inks, organized about 1909 under the laws of New York and owned by Emil Worlitzer, of Leipzig, Germany.

JACOB HASSLACHER EXAMINED

Jacob Hasslacher, president of the Roessler and Hasslacher Chemical Company, has been questioned at length by Deputy Attorney-General Becker and Joseph H. Choate, Attorney for A. Mitchell Palmer, Alien Property Custodian, as to his knowledge of the circumstances under which a majority control of the Roessler and Hasslacher Chemical Company, the Perth Amboy Chemical Company and the Niagara Electro-Chemical Company passed from the hands of German business men into those of Mr. Hasslacher and his associates.

The most important statement obtained from the viewpoint of the investigators was the admission that he still holds the highest regard for his former German connections and would feel morally bound to recompense them at the end of the war should they assert that he had used the fact of war's imminence to obtain a low price in buying their holdings in the three companies.

The investigation into the stock transfer has not yet been completed, and further hearings will be held early in September, at which it is expected more important testimony than has yet appeared will be brought out.

Training of the Industrial Chemist

Much to Be Learned in Experimental Plants and from Intuitive Knowledge of Workmen

By GILBERT J. FOWLER, D.Sc., President of Chemical Section, Indian Science Congress

THE important matter to be decided in the training of the applied chemistry student is—how far is he to be trained as an engineer and how far as a chemist? The question of the relationship between the chemist and the engineer raises issues in my view fundamental to the right development of chemical industry. After 20 years of close association with engineers in attempting to solve problems in applied chemistry, I am clear that the two professions have their distinct spheres; and trouble is bound to arise either when the chemist poses as an engineer or perhaps, still more, when the engineer poses as a chemist. At the same time, the chemist should know enough of engineering to know what it is reasonable to ask an engineer to do; and the engineer should know enough chemistry intelligently to grasp the chemist's requirements. Having said so much, however, I would add my further firm conviction that the chemist, and not the chief engineer, must be the captain of the ship.

It is true that in a big chemical works the engineer is everywhere in evidence; he puts up the blast furnace, the sulphuric acid plant and the gigantic gas holder and all the things that strike the eye. Yet all these things are only means to ends; and if the active directing thought is not chemical, they will become a dead weight and a bar to progress. Special qualities are demanded of our applied chemist, if he is to take the place which is his of right.

It is unfortunately true that many of the chemists trained in the ordinary schools are not fitted to deal with large practical problems demanding courage and initiative and the power of controlling men and machinery, and so the responsibility passes into the hands of the engineer.

Must Understand Workmen

But if the chemist is to assume this last responsibility as he should, he must cultivate, besides his scientific and technical knowledge and experience, a knowledge and experience, a knowledge of humanity. He must learn to understand and sympathize with the workmen who carry out his instructions. He must realize that although a workman may not be able to express himself in scientific language, his daily contact with the process gives him an intuitive knowledge which is a natural integration of data only obtained by the trained chemist after much labor and observation. I have watched the gradual working up of a mass of molten steel in an open hearth furnace. The chemist comes along and takes his sample, and as rapidly as possible does a carbon color test. But the workman in charge looks through the blue glass at the boiling mass and says to his mate: "I think she's about right now, Bill"; and he pours the charge successfully without reference to the chemist. Not only must there be this human understanding between the chemist and the workman in charge, but every subordinate, down to the humblest wheeler out of ashes from the boiler, must feel that he has his proper part to play in the right working of the whole organization under its directing head.

How is this type of man to be produced? In the first place, the general type will depend not on any detailed educational program, but on the spirit which informs that program. Though it is essential that an absolutely sound foundation of chemistry, physics, and if possible mathematics, be laid, yet if the tone of university life be to separate the graduate from his humbler brethren, so that when he meets them in the works he does not feel the fellowship of common service, it is to that extent unfitting him for his career in applied chemistry.

Value of Experimental Plants

Advantage should be taken in the courses of purely scientific chemistry, whether inorganic, organic or physical, to choose typical examples from technical chemistry to illustrate general principles. A student whose theoretical training has been given this practical bent and whose social education has been in the direction of a wide and generous humanity will, especially if he has devoted some of his vacation time to workshop practice, be in a position to take advantage of the more specialized post-graduate training which is to fit him to enter a works with some confidence. In this post-graduate training he should come in contact with an experimental plant typical of all general operations, such as disintegration, desiccation, distillation, filtration, etc. Such a plant may be the smallest unit, capable of turning out a technical, as distinct from a laboratory yield of any given product, but it should be an exact model, if possible, of a full-scale plant.

It is a good thing for a student to 'worry through' an operation on a semi-technical scale with sufficient guidance only to prevent injury to the plant, and that he should have more systematic teaching later. Students who have been judiciously watched and guided, without too much detailed instruction at first in the operation of various typical pieces of experimental plant, are much better able to appreciate systematic instruction. After some six months, then, of this exploring work in any specific direction, which each student may, for various reasons, choose, all students should be given a short course of lectures on mechanical engineering, fuel, steam and power problems, with special reference to a chemical plant. They should also then devote some time to mechanical drawing and to working out problems in plant and machine design.

Working Out Industrial Problems

In this way they will acquire confidence in the preliminary consideration of actual manufacturing propositions which they will have to discuss with the mechanical engineer later. Along with this, they

should be guided in the right way of handling some specific industrial possibility and asked to work out a business proposition from the data of their laboratory or experimental semi-technical experiments. These reports may be criticized by the professor and form a very useful method for developing that technical sense to which reference has been made. Further criticism of such reports may be obtained by making them the subject of a colloquium, where they are open to discussion by the whole staff and the general body of students. Whenever possible, visits to actual works should be encouraged. At present, at the Indian Institute of Science, these methods are being tried out in a modest way; it is not possible for more than a limited number of paths of industrial research to be followed. But one foresees the time when there will be a model plant for each staple industry. War conditions, for example, have caused the installation of a complete model of an acetone fermentation plant, which enables the greater number of essential problems of this highly modern industrial development to be tried out.

This is also the case in regard to the sandal oil industry, which is now such a source of profit to Mysore. Again the production of soap will shortly be transferred from the department of applied chemistry to a new factory in Bangalore. The students who have worked through these experimental plants will not feel strange when they go into large scale works, and they also will have learnt to appreciate the help of labor and how they can direct it to the best advantage by wise and humane encouragement and sympathy, without sacrifice of strict discipline.

CHEMICAL INDUSTRY IN CHINA

Japanese activity in establishing chemical works in Kwangtung, a South Manchurian province on the peninsula east of the Liaotung Gulf leased by Japan, has prompted the suggestion that great possibilities exist for the establishment of similar enterprises in other parts of China. The factories already set up cover the manufacture of sulphuric acid, compounds of barium, caustic soda, creosote, bean oil for soap, and the manufacture of stearin and glycerin. There is little doubt that these products emanate from materials available in Manchuria itself and that a further investigation of China's natural products would result in the discovery of numerous further sources of supply which could be advantageously exploited. Oil suitable for making ointments and medicated soaps should be readily obtainable from China. Wool is available for the preparation of lanolin, kelp for the manufacture of iodine, and Shantung cotton for the manufacture of sterilized and medicated cotton. Raw material is within reach for the production of calomel, and caffeine could be produced from the tea sweepings in Hankow, while a range of valuable products could be extracted from coal deposits and coal oil. A writer in the "Far Eastern Review" asserts that alcohol and ammonia could be made in any quantity; the most important acids could be cheaply made together with such products as nitrate of silver. It is suggested that a conference of Chinese and foreign physicians, chemists and pharmacists should take up the question of interesting capitalists in the matter and should place themselves at their disposal with a view to supervising manufacture.

News of Companies

The American Cotton Oil Company, 65 Broadway, New York, has leased the entire fourth floor at 31 Maiden Lane, to provide for expansion.

The Western Rosin & Turpentine Company, Detroit, Mich., has recently increased its capital from $25,000 to $50,000 to provide for expansion.

The Imperial Chemical Company, Grand Rapids, Mich., manufacturer of chemicals, is considering plans for improvements and alterations in its plant on Ann Street.

The Western Paper Makers' Chemical Company, Kalamazoo, Mich., has filed notice of an increase in its capitalization from $100,000 to $200,000, to provide for business extensions.

Property has been leased by the New York Color & Chemical Company, 212 Pearl Street, New York, at 98 John Street and 17 Platt Street, for a number of years, at an aggregate rental of approximately $50,000.

The General Manufacturing Company, Swanson and Snyder Streets, Philadelphia, Pa., manufacturer of chemicals, has acquired property at Delaware Avenue and Bigler Street, for a consideration of about $110,000, to be used for extensions.

The Southern Pine Tar & Oil Company, Savannah, Ga. has filed articles of incorporation with a capital of $200,000 to engage in the production of pine tar, oils, etc. W. W. Wilder, Henry Henken, and W. H. Proctor are the principal incorporators.

The Contact Process Company, Abbott Road, Buffalo, N. Y., manufacturer of chemicals, etc., is planning for immediate work on alterations and improvements in its two brick factory buildings on the Buffalo River. The work is estimated to cost $12,500.

The Sun Company, Marcus Hook, Pa., manufacturer of oils, etc., has awarded a contract for the construction of a new two-story administration building at its plant, to cost $20,000. Barclay White & Company, 1713 Sansom Street, Philadelphia, is the contractor.

Dill & Collins, Philadelphia, Pa., are making rapid progress in the construction of new additions to their plant at Richmond and Tioga Streets. The structures include a new chemical plant, caustic fusing building, evaporation works, etc., and are estimated to cost approximately $50,000.

The American Oil & Supply Company, Lafayette Street, Newark, N. J., has awarded a contract for the erection of the proposed new one-story building, about 60 x 300 ft., to be located on Wilson Avenue, near Stockton Street. The structure will cost $30,000. The William G. Sharwell Company, 377 North Fifth Stret, Newark, is the contractor.

The Cantonment Division of the War Department, Washington, D. C., has completed plans and specifications for the proposed new chemical works to be operated by the Government at Kingsport, Tenn. Bids will soon be called for the erection of the first unit of the plant, estimated to cost $500,000. The works will be equipped to specialize in the production of chemicals for war service.

Trade Notes and Personals

John B. Stobaeus, connected with the firm of Charles Cooper & Company, manufacturing chemists, Newark, N. J., in the capacity of treasurer, died recently at his home in Belmar, N. J. He was born in Germany 74 years ago. He came to the United States when a boy and fought in the Civil War.

It has been stated in London by representatives of the British Government that import restrictions are at present being operated entirely in accordance with the American Government's desire that no licenses should be issued by the British Government except for goods of national importance. In the attempt to carry out this American suggestion the Department of Import Restrictions is making a very close study of all articles for which permits are requested—including proprietary medicines, borated talcum powder and numerous other things the importation of which was permitted till very recently.

Application has been made for the British registration of the French National Trade Mark, which is published in the current issue of the "Trade Marks Journal." The British registration of this mark is certain to be stoutly opposed by owners of trade marks with which it comes into conflict. There is no doubt that it will also be vigorously resisted by those in opposition to the registration of any National trade mark. This opposition includes a vast majority of important British owners of private trade marks, chambers of commerce, and other commercial organizations.

A dredge intended for placer mining for platinum in the San Juan River ,in the department of Cauca, Colombia, has arrived at Panama. An American syndicate is engaged in developing the deposits discovered.

The Dye Products & Chemical Company bought the vacant plant at the southwest corner of Vanderpool street and Avenue B, Newark, 314 x 100, from Hugh Kinnard as a site for a factory building.

Dr. Arthur B. Lamb, assistant professor and director of the Harvard chemical laboratory, has been appointed lieutenant-colonel and assigned to the Chemical Warfare Service. He is a graduate of Attleboro High School, Tufts College and Harvard University. He received the degree of Ph.D from both Tufts and Harvard. The Harvard Foreign Fellowship was conferred on him and he studied for fourteen months at Leipsic and Heidelberg. For some time he was director of the Havemeyer laboratory in New York.

H. H. S. Handy, of Syracuse, N. Y., has been appointed chairman of the chemicals, oils and paints section of the Syracuse division of the Bureau of Resources and Conservation of the War Industries Board.

Work on the arsenic mine in Queensland, Australia, is proceeding steadily, and the results achieved are so satisfactory that the Queensland Government intends to build a roasting plant estimated to cost $25,000.

Secretary William F. McConnell, of the Drug Trade Division of the National War Savings Committee is urging the drug trade to increase its purchases of War Savings Stamps in order to bring the total up to the allotment.

The Chemical Company of America has filed notice of an increase in capitalization from $125,000 to $625,000.

JAVA'S CINCHONA OUTPUT IN 1917

More Than 348,000 Kilos of Bark Delivered at Amsterdam and Nearly 147,000 Kilos Used by the Bandoeng Quinine Factory—Average Content 6.17 Per Cent

(*Special Correspondence to* DRUG AND CHEMICAL MARKETS)

Amsterdam, Holland, Aug. 4—During the year 1917, 348,118 kilos of factory bark were delivered at Amsterdam and 146,889 kilos were taken by the Bandoengsche Kinine-fabriek (Bandoeng Quinine Factory). The average content of factory bark was 6.17 per cent as compared with 6.17 per cent in 1916, 6.25 per cent in 1915 and 6.03 per cent in 1914.

From January 18 to December 14, 1917, 7,343 packages, with a content of 657,481 kilos of pharmaceutical bark and 17,895 kilos of sulphate of quinine, were offered at auction. Of this were sold 284,312 kilos of pharmaceutical bark and 7,556 kilos of sulphate of quinine.

At the beginning of the year there was little inclination to buy. Later the market became firmer, although large quantities were held up at auction. However, as the supply decreased the parcels offered were better taken up and before and after auction sale much of the material held over was disposed of. Thus of the totals sold, 154,143 kilos of pharmaceutical bark and 4,397 kilos of sulphate of quinine were disposed of before and after auction. At the end of the year the first hand stock of pharmaceutical bark was extremely small.

Total amounts sold during the last ten years on the Amsterdam market were:

	Cinchona Bark Kilos	Sulphate of Quinine Kilos
1908	7,580,172	447,200
1909	8,134,093	484,958
1910	8,573,912	516,639
1911	8,325,365	518,624
1912	6,635,401	398,535
1913	7,771,020	455,204
1914	7,376,224	419,306
1915	7,014,498	418,495
1916	7,893,352	488,694
1917	5,821,250	355,674

The report of the Government Cinchona Bark Estate, at Java, for the fourth quarter of 1917 shows that though the season was fairly rainy, the heaviest rainfalls occurring in October, weather was on the whole favorable. Pests and diseases were not very troublesome, and while in 1916 certain plantations had suffered more or less from attacks by *Euproctis flexuosa*, this pest was only sporadically observed during the last year. The mite plague in the seed beds, which was mentioned in a previous report, decreased considerably; up to the present, dusting with sulphur powder proved to be one of the best remedies. Here and there louse infection was discovered, especially on the lower stems of young Succirubra. Washing with a tobacco soap solution was successful in combatting the pest. Labor was satisfactory.

The 1917 crop amounted to 732,845 kilos of Ledgeriana and Hybride bark, 69,771 kilos of Succirubra bark and 77,484½ kilos of Robusta bark—in all 880,100½ kilos. Of this, 98,425 kilos were shipped; 289,532½ kilos were delivered to the Bandoeng Quinine Factory and 300 kilos to Medical Stores, while stock in Java totaled 491,843 kilos.

The 1916 crop was 739,492½ kilos of Ledgeriana and Hybride bark, 76,669 kilos of Succirubra bark and 85,200 kilos of Robusta bark.

On account of the shortage of ship tonnage and difficulties connected with storing for any length of time the crop of pharmaceutical bark was reduced in the last year.

BRITISH WAR TRADE SUGGESTIONS

Chambers of Commerce Protest Customs Orders Affecting Prohibited Exports—Free Ports in the British Isles Favored—Safeguards for Trade Secrets

Discussions in regard to government control of trade and industry formed the outstanding feature in the annual meeting of the Association of Chambers of Commerce of the United Kingdom. Among the resolutions adopted were the following:

This Association, recognizing the supreme importance to the country of cordial cooperation between capital and labor, and of the existence of amicable relations between employers and employed, welcomes the recommendation of the Whitley Report to create industrial councils and agrees—

(1) That the employers and employed in the various industries should formulate schemes for the establishment of such councils for the regulation of wages, conditions of employment of the workers, and all matters affecting the welfare of the workers, and

(2) That these councils should be set up by voluntary action on the lines considered by those interested to be the best suited for the requirements of the different industries and their varying conditions.

This meeting approves the bill prepared by the executive council, in agreement with the Bankers' Institute and the Decimal Association, for the purpose of decimalizing the coinage and urges upon his Majesty's Government the desirability of passing it into law at the earliest possible moment.

In the opinion of this Association it is very desirable that a large amount of the information which has been acquired by government committees appointed to make inquiries should be published for the information of the commercial community at the earliest date possible.

This Association views with apprehension the methods adopted by the Government in connection with the control of trade and industry as affecting the legitimate business of manufacturers, merchants, and traders, and while recognizing the necessity for reasonable restrictions in the national interest, urges that they should not be continued after the war except where absolutely necessary in the economic interests of the country, which require that the existing channels of business in connection with imports and exports, combined with the practical experiences of persons engaged therein, shall be utilized to the fullest possible extent.

This Chamber views with concern the multiplication of officials in so many departments of trade and civil life in recent years. They recognize that the war has made control necessary in some directions, but they feel the steady increase of the army of officials already overlarge, of one kind and another, constituted a danger to the development of our industrial life, and they urge upon the Government the desirability of limiting the further appointment of officials to what is only absolutely necessary, and more particularly to keep in view the demobilization of those now appointed immediately circumstances and opportunity admit of this being done with safety.

This Association, being earnestly desirous, as hitherto, of rendering His Majesty's Government every possible assistance in the prosecution of the war, would respectfully direct the attention of His Majesty's Privy Council to the serious inconvenience and loss occasioned exporters by reason of the action of the customs authorities at several British ports, in making, and endeavoring to make, retrospective orders in council affecting prohibited exports; and, with a view to the reasonable facilitating of legitimate trade, whose protection is necessary in national interests, would strongly recommend that such orders should not be brought into operation against goods dispatched for shipment from the center of production within a specified time prior to the date of the order, or orders, in question.

That it is advisable, in the interest of British trade and of world commerce generally, that the question of the institution of a number of free ports, at convenient points in the British Isles, should receive early consideration; and it is resolved that a special committee of the Association of Chambers of Commerce be formed immediately to take such steps as may be considered necessary.

Whereas duly authorized officials of the Admiralty, the War Office, and the Ministry of Munitions are empowered under Regulation 8ec. (Sept. 12, 1916) of the Defense of the Realm Acts to demand from manufacturers the disclosure for national purposes of their secret processes:

Whereas the safeguards against the subsequent improper use of the valuable information thus obtained are, in the opinion of the Association, inadequate:

This Association recommends to the departments named:

(a) That the safeguards should be made adequate and permanent.

(b) That such a regulation should be enforced only with the greatest discretion, as it is manifestly unfair that processes of manufacture which have been evolved by various firms after an expenditure of much capital and after considerable research and organization, should be disclosed to persons who might ultimately profit by this knowledge to the prejudice of the present manufacturers.

That in view of the fact that many owners of patents have been entirely prevented from exercising their patent rights or exploiting their patents owing to the war, a provision should be made for the prolongation or extension of the life of such patents, and that in view of the fact that this necessity arises solely from the conditions of the war and will terminate on its conclusion, this Association respectfully urges that any legislative proposals necessary to deal with the question should be embodied in a separate measure and passed into law as speedily as possible.

ACETIC ACID PRODUCTION IN CANADA

Much of the progress which has been made in Canada since the outbreak of the war towards manufacturing the chemicals formerly imported from abroad is due to the work of the Imperial Munitions Board at Ottawa, which has encouraged many firms to take up the preparation of the chemicals specially required for war purposes. One of the most important of these enterprises is the production of acetone and acetic acid by the Shawinigan Water & Power Co. at their plant at Shawinigan Falls, Que.

In the early days of the war the demand for acetone greatly exceeded the supply. This chemical was at that time made by the dry distillation of calcium acetate, which is a by-product in the distillation of wood, but the Shawinigan Company were requested to attempt its manufacture from calcium carbide as a new raw material. A new process was accordingly worked out, involving first the production of acetylene from calcium carbide; second, by the production of acetaldehyde from the acetylene; and finally the the oxidization of the acetaldehyde to produce acetic acid.

The company produced acetone for about a year, until the demand for acetic acid became so great that they discontinued the making of acetone in order to furnish large supplies of acetic acid to the Imperial Munitions Board. This product is used in the manufacture of acetic anhydride and cellulose acetate, the latter being used as a waterproof and fire-resistant coating for aeroplane wings. It is in great demand by the United States Government, which has given extensive orders resulting in the doubling of the capacity of the Shawinigan Falls plant. Deliveries to the American authorities will be made early in October, when the output of acetic acid made by the new process will exceed that produced the world over under the old method.

PEPPER CROP OF DUTCH EAST INDIES

The number of pepper vines in Banka and environments, Dutch East Indies, which amounted to 9,169,888 at the commencement of 1916, increased to 11,600,229 in 1917. The total production of marketable pepper in this district was 4,644,575 kilos. Prices for white pepper ranged from 712 to 810 florins (a florin 40.2 cents, normal rate of exchange) per ton, while black pepper fetched from 324 to 648 florins per ton.

The exports of white pepper totaled 3,914,300 kilos and of black pepper, 690,265 kilos. In the Riouw Archipelago pepper was planted as a catch crop between gambir; the exports from this part were 122,100 kilos in 1916 against 106,660 kilos in 1915. From the small plantations of Billiton 20,500 kilos white and 1,544 kilos of black pepper were shipped.

In the Pontianak and Singkawang districts, Borneo, pepper is cultivated by Malays, Chinese and Dajaks. Shipments of white pepper from here increased from 41,430 kilos in 1915 to 223,845 kilos in 1916, while black pepper rose from 607,748 kilos in 1915 to 1,772,259 kilos in 1916.

Planting in the Lampong districts is also expanding, and in 1916 the exports were 8,195,720 kilos valued at 4,775,800 florins. The pepper crop in Benkoelen was below that of the previous year owing to continued dry weather. Exports consequently fell from 1,063,138 kilos in 1915 to 430,319 kilos in 1916. In the Mana, Kaura and Kroe divisions the acreage was increased.

The eucalyptus oil industry is of considerable importance in New South Wales, Australia. The oil is used mainly for three purposes—in pharmacy, in the separation of metallic sulphides, and for perfumery and flavoring. There are about three hundred species of eucalyptus in Australia, but of these not more than twenty-five varieties can be used for oil.

GERMANY'S STOLEN CHEMISTRY

The series of articles on "Germany's Stolen Chemistry," which appeared in DRUG & CHEMICAL MARKETS in the Spring has been reprinted in pamphlet form and many chemical companies are distributing them in their daily mail. The pamphlet fits the ordinary business envelope. Extra copies of this reprint will be supplied at the following rates: Single copies, 10c each; 100 copies, $2.00; 200 copies, $3.00; 500 copies, $6.00; 1,000 copies, $10.00. All postage prepaid to one address.

GERMAN CHEMICAL DIVIDENDS

The year 1917 was for the German chemical industry a period of intense activity, far-reaching achievement, and profitable enterprise, says the "British Board of Trade Journal," quoting the German press. During the year work was abundant and prices high; the profits were therefore good.

For the six companies surveyed by the "Frankfurter Zeitung," the gross profits for 1917 were 194,900,000 marks, being 41,400,000 marks in excess of those for 1916. The amounts written off totalled 63,400,000 marks, showing an increase of 18,300,000 marks over the figures for 1916. The "Frankfurter Zeitung" observes that doubtless further considerable sums must have been written off which do not appear in the balance sheets. The German chemical works have always adopted the policy of making ample provision under this head; in fact it is to this policy that their great strength is due. During the war they have continued the course, taking into account on the one hand the depreciation of plant resulting from intensive day and night work, and on the other hand, the uncertainty of the future and the necessity of assuring a smooth transition to peace conditions.

The net profits of the six concerns rose during 1917 by 14,000,000 marks to 110,000,000 marks; but as the capital involved had been increased, a lower dividend was declared for all companies save one, which declared the same dividend as in the preceding year. The average dividend for 1917 was thus 18.78 per cent, as against 24.84 per cent. in 1916; the actual amount paid out in dividends however was 63,100,000 marks as against 53,070,000 marks in the year before.

MAKING AMMONIA BY NEW PROCESS

The largest experimental plant in the United States for the manufacture of fixed nitrogen from the air, with the exception of the ones now being constructed for the War Department is in operation at the Department of Agriculture Experiment Farm, Arlington, Va. At this plant the nitrogen from the air is combined with hydrogen to form ammonia which can be used in the manufacture of explosives and fertilizer.

Experiments are now being conducted at this plant by the Bureau of Soils with a view to increase the efficiency of the process. What is known as the Haber process of nitrogen fixation is being used. This process involves the production of ammonia from hydrogen and nitrogen. The two gases are mixed in the proper proportions, put under high pressure, subjected to intense heat and passed over spongy iron, whereupon a portion of the mixture combines to form ammonia.

HIGH COSTS IN POTASH MAKING

Having visited fourteen potash plants on the Pacific coast, Frederick W. Brown, in charge of the office of fertilizer investigations, United States Bureau of Soils, has found that the cost of recovering potash is still high. All the plants are producing a quantity of potash; but, with the possible exception of the cement plants, they are doing it at such a cost that it is doubtful if they can compete with the German product in normal times.

U. S. LICENSE AND COMMERCIAL TAX

A Federal license tax on professions was inserted in the Revenue bill, this week, by the Ways and Means Committee. It provides that a tax of $10 a year shall be imposed upon the proprietors of a business or a professional doing a business of $2,000 or more a year. In case the business is wholesale and in excess of $200,000 per annum, the tax will be $25. The exemptions under this tax are employes, farmers, school teachers and ministers of the gospel.

Chairman Kitchin in announcing that the bill would provide means for raising all of the $8,000,000,000 originally allotted to be raised by taxation made the following statement:

"To-day we put a 10 per cent. tax on all jewelry composed wholly or partly of platinum, in addition to the 10 per cent. manufacturers' tax on all forms of jewelry, as agreed to already by the committee. We require vendors to keep a record, so the Government may know where all the platinum in the country is located and how much.

"The committee adopted an occupation tax. There is no definite estimate yet as to how much it will raise in revenue. Under the plan adopted, the proprietors of any concern doing business of $2,000 a year or more, will pay $10 annual tax, and wholesale concerns doing business of $200,000 or more will have to pay a tax of $25 along similar lines. This does not apply to clerks or employes of concerns, nor to salaried men. Farmers, clergymen, school teachers and mechanics also are exempted."

CONSUMER TO PAY PROPRIETARY TAX

The Ways and Means Committee has reconsidered the proposed tax of ten per cent. on proprietary medicines and has changed the burden from the manufacturer to the consumer. It is now proposed to tax the article ten per cent. which will be paid by the purchaser.

It was urged that the manufacturer would be heavily taxed on income and profits.

The Committee raised the taxes on all soft drinks by placing a ten per cent. tax on all such drinks when sold by the manufacturer, importer, bottler or producer and a tax of two cents on each ten cent drink sold at a soda fountain. Drinks sold for less than seven cents will pay a tax of one cent.

The tax on near-beer, ginger ale and grape juice and all beverages containing one-half of one per cent. of alcohol will be taxed ten cents a gallon. It is estimated that the new taxes on soft drinks will produce $100,000,000.

FRANCIS KEELING, Jr., DEAD

Francis Keeling, Jr., president of Humiston, Keeling and Co., wholesale druggists of Chicago, died suddenly, last week, at Harbor Point, Mich. Mr. Keeling was founder of the firm of which he was president. He was born in Brooklyn, N. Y., sixty-four years ago, but had spent most of his life in Rockford, Ill., prior to going to Chicago. Mr. Keeling had made all preparations to retire from business when his death came. Realizing the need for a vacation, he had made arrangements for his brother, W. B. Keeling, and his son, L. M. Keeling, to act as managers.

Dr. Abraham Henwood, professor in chemistry at the Drexel Institute, Philadelphia, Pa., has resigned to become associated with the Hercules Powder Company, to engage in special research work. Dr. Henwood was formerly presiding officer of the Philadelphia section of the American Chemical Society.

The Drug & Chemical Markets

MARKET STRIPPED OF SOME DRUGS

War Conditions Prevent Arrival of New Supplies—In Other Cases Prices Have Declined Owing to Over-Production or Large Stocks from Primary Markets

PRICE CHANGES IN NEW YORK
(Stocks in First Hands)

Advanced

Celery Seed, ½c
Colocynth Apples, Spanish 6c
Fennel Seed, French, ½c
Ipecac Root, Cartagena, 10c
Isinglass, Russian, 25c
Menthol, 15c
Nutmegs, Singapore, 1c
Tonka Beans, Angostura, 5c
Mustard Seed, ½c@1c
Sandalwood Oil, East Indian, 25c

Declined

Acetphenetidin, 15c
Bay Rum, Porto Rico, 15c
Doggrass Root, U.S.P., 10c
Ergot, Russian, 5c
Licorice Root, Russian Cut, 10c
Mace, Batavia No. 2, ½c
Potassium Permanganate, 5c
Poppy Seed, Russian, 2c
Foenugreek Seed, ½c

The market for crude drugs reflects the difficulties in renewing supplies. Commodities of Austrian, Turkish and Persian origin have now been exhausted and none can be obtained from England or other sources. Lack of shipping facilities handicaps importers of products from the Dutch East Indies and other markets of the Far East. Japan has cut off crude camphor shipments, and freight rates and insurance are almost prohibitive on cheaper products.

Cartagena ipecac root and colocynth apples (Spanish) were advanced. Lack of supplies resulted in a higher price for menthol, and the same situation applies to Russian isinglass and oil of East Indian sandalwood.

Increased production coupled with fewer inquiries resulted in lower prices on some commodities. Acetphenetidin and Russian cut licorice root have been reduced. Porto Rico bay rum is lower.

Herbs, seeds, leaves, etc., are firm under an active demand. Celery, coriander, caraway and cumin seed led in the advance in prices based on scant stocks. Botanical drugs closed firmer with prices tending upward for ergot, nux vomica and St. John's beans.

Exporters have won their fight against the abolition of the through bill of lading to the Pacific Coast, which eliminates a menace to business with the Orient.

Acetanilid—According to reports, first hands are booking orders at 75c a pound, but on large quantities prices are being shaded for U. S. P.

Acetphenetidin—Absence of inquiries resulted in a further decline of 15c. Makers are offering parcels at $3.35 @ $3.50 a pound and in some quarters as low as $3.25 is being accepted owing to keener selling competition.

Amyl Acetate—As a result of scant supplies and smaller offerings, the trend of prices is stronger. Sellers are asking $5.35 @ $5.40 a gallon for supplies in bulk, drums included.

Bay Rum, Porto Rico—Prices weakened in response to freer offerings due to a fair accumulation of stocks. Holders lowered prices 25c to $3.45 @ $3.65 a gallon as to brand.

Borax—The demand is more active and prices closed firmer. Holders are naming 7¾c @ 8¾c a pound for crystals in barrels and 8¾c @ 9c a pound for supplies of U. S. P.. in kegs.

Caffeine Alkaloid—Continued firmness pervades the market in response to increased activity among second hands. First hands are quoting former figures for supplies in bulk at $11.75 @ $12.25 a pound.

Celery Seed—Prices are higher on account of scant stocks. Holders are naming ½c advance to 41½c @ 42c a pound.

Chillies, Japanese—All grades are quiet and a shade easier owing to selling pressure. Holders of Japanese lowered prices ¼c to 16c @ 16¼c a pound.

Colocynth Apples, Spanish—Prices registered a sharp rise of 6c to 35c @ 39c a pound, owing to decidedly small arrivals and meager supplies here. Sellers are naming 35c @ 39c a pound. Trieste closed nominal and for pulp U. S. P. 48c @ 49c a pound is asked.

Doggrass Root, U. S. P.—Prices declined sharply owing to large offerings and absence of demand. Holders lowered quotations about 10c to 42c @ 45c a pound for domestic root.

Ergot—The market is firmer under larger inquiries and holders raised quotations 5c to $1.10 @ $1.15 a pound for Russian. Diminishing offerings from abroad caused a stronger sentiment here.

Fennel Seed, French—Holders raised prices ¼c to 16½c a pound. Offerings are limited owing to meager supplies.

Foenugreek Seed—Prices closed ½c lower to 13c @ 13½c a pound. The decline is attributed to a light demand and offerings of new crop seed for August shipment at 10½c @ 11c a pound.

Gingers—Prices closed steady but the demand lacks animation. Sellers of good white Jamaica lowered quotations ¼c to 17¼c @ 18c a pound.

Guaiac Gum—Quotations are nominal and only small lots have been traded in. Holders are asking former prices at $1.25 @ $1.30 for whole, and $1.45 @ $1.50 a pound for powdered.

Hemp Seed, Manchurian—Increased offerings and lack of demand weakened the market. Sellers lowered prices ¼c to 16¼c @ 16½c a pound.

Ipecac Root, Cartagena—Prices were raised 10c to $3.25 @ $3.30 a pound. Larger inquiries and rising primary markets were responsible for the advance.

Isinglass, Russian—Scarcity of supplies both here and abroad led to an advance in quotations. Holders raised prices about 25c to $7.45 @ $7.70 a pound. Buyers say it is difficult to make purchases because of limited offerings.

Lemon Oil—This product attracted increased attention in response to bullish cable advices from Italy noting higher prices based on an active demand. Sellers advanced quotations to $1.05 but sales at $1 a pound were reported.

Licorice, Russian, Cut—Larger arrivals and an inactive demand, depressed the market. Holders lowered quotations 10c to 74c @ 75c a pound. Other varieties closed easy in sympathy with the decline for Russian root.

Mace—Offerings of Batavia No. 2 are made at ½c lower to 46½ @ 47c a pound. The decline was due to larger offerings and fewer inquiries. Other kinds are also dull but quotably unchanged.

Mercury—Prices are firm owing to the continued light supply and an advance is probable. Selling agents are quoting $125 a flask of 75 pounds while up to $130 is named by some holders.

Mandrake Root—An active demand caused an upward trend of the market. Holders are quoting 8½c @ 9½c a pound and offerings have decreased in view of a probable advance.

Menthol—Limited offerings and increased inquiries led to an advance of about 15c to $3.45 @ $3.50 a pound. It is estimated that it would cost about $3.65 a pound to import menthol at this time.

Nutmegs—The market is steady at recent advances under a considerably reduced stock. Singapore nuts, 110 to the pound, were raised 1c to 38c @ 39c a pound.

Pepper—Prices are barely steady and futures closed lower. Spot parcels of Singapore black are offered at 26½c @ 27c while white pepper is held at 33c @ 33¼c a pound.

Peppermint Oil—The market for bulk oil is gradually strengthening in response to a further decrease in stocks and offerings from the west. Parcels are held at $3.25 a pound for bulk oil. Supplies in tins closed at $3.40 and in bottles at $4.20, while rectified oil is held at $3.45 @ $3.50 a pound.

Potassium Permanganate—A continued absence of inquiries, larger stocks and brisk selling competition led to weaker prices. It was reported that sales down to $1.30 a pound have been booked. The general quotation closed nominal at $1.45.

Tartar, Cream—In response to the strong statistical position of crude tartar and small arrivals, prices closed firmer, but unchanged for U. S. P. crystals at 69c, and 68½c for powdered 99 per cent. Trading among second hands is increasing at prices ranging from 80½c @ 91c a pound for crystals.

Tonka Beans—All kinds are in good demand and most holders are demanding higher prices, based on firmer primary markets and moderate stocks. In some quarters 5c advance is asked for Angostura $1 @ $1.10, Para 69c @ 74c and Surinam 65c @ 68c a pound.

Morphine—Prices closed steady under fair inquiries. Makers are repeating quotations on the basis of $11.80 an ounce for sulphate supplies.

Mustard Seed—Holders raised prices for English yellow 1c to 28c @ 29c and ½c to 19½c @ 20c a pound for California Trieste brown.

Opium—The demand is larger but a weak tone pervades the market. Holders are maintaining prices at former levels on the basis of $22.50 a pound for U. S. P. in cases, granular $24.50 and powdered $24 a pound.

Poppy Seed, Russian—Sellers announced a reduction of 2c to 78c @ 79c a pound. Lack of inquiries and some selling pressure weakened prices.

Quinine—Makers find it difficult to fill orders. In view of larger shipments of crude material prospects for an increased production are favorable. Trading among second hands lacks animation. Domestic manufacturers continue quoting on the basis of 90c an ounce for sulphate covering 100 ounces in tins.

Sandalwood Oil, East Indian—Scarcity of East Indian sandalwood caused stronger prices for the oil. Handlers advanced quotations to $13.40 @ $13.60 a pound, as to brand showing a gain of 25c.

Wintergreen Oil, Sweet Birch—Prices rule strong at $4 and upward a pound, based solely on short supplies. Offerings of adulterated oil continue fairly large despite the fact that quantities of the adulterated oil are being seized by the Government and destroyed. Synthetic sweet birch oil is selling at much lower figures, ranging from 80c to $1 a pound, as to brand.

SPICE ASSOCIATION ELECTS OFFICERS

The American Spice Trade Association held its annual meeting last week ,at 124 Front Street, New York. The following officers for 1918-1919 were unanimously elected:

President, L. Littlejohn, of L. Littlejohn & Co.; vice-president, John Clarke, of John Clarke & Co.; secretary, Benjamin H. Old, of Old & Wallace; treasurer, J. Melville Morris. Director, to serve three years, R. M. Littlejohn.

Arbitration committee: Lomax Littlejohn; John B. Elliman, of Balfour, Williamson & Co.; Robert A. Watson, of Gillespie Bros. & Co.; Patrick W. Walsh, of Van Loan & Co.; Rutger Bleeker, of Rutger Bleeker & Co.

The following resolution was moved by John Clarke and seconded by Mr. Joyce, of the A. Colburn Company, and was unanimously adopted, after considerable discussion:

"Resolved, that the president be authorized to appoint a committee of five, including one of the directors, to lay before the directors definite suggestions for the creation of additional service to manufacturers and grinders, under the auspices of this association; and that the board of directors be requested to consider the same, and call a special meeting of the association as soon as may be feasible, in order to ensure full discussion, and if possible, to bring about whatever special benefits to grinders and manufacturers may be found to be practicable and efficient."

In his annual address President Littlejohn said:

"There is a growing conviction in some people's mind that the Government will either embargo or restrict the import of peppers and other spices. This will doubtless result if such action will tend directly or indirectly to win the war. I am convinced that the members of the war boards are capable and efficient and have only this end in view and if they decide for any reason that an embargo on spices is necessary, it will come, and if so, we shall accept the situation cheerfully with true patriotic spirit, if it serves the nation in her hour of need."

The treasurer's report showed a total membership of 107 firms in good standing, no liabilities and $1,146 in the treasury.

MAKING AROMATIC OILS IN THE WEST

The manufacture of aromatic oils and synthetics has been begun by the American Synthetic Laboratories recently incorporated. The commercial supervision of the products has been undertaken by the Acme Sales Corporation, 189 North Clark Street, Chicago. These oils have previously been imported from Europe. The technical work is in charge of Dr. Paul Hershman, who supervises the manufacture. Dr. Hershman, who was formerly chief chemist of Armour & Co. and a director of the National Research Laboratories, worked out the processes which are being used by the American Synthetic Laboratories.

ARMY WORM ATTACKS CASTOR BEAN

Ravages of the army worm in the castor bean acreage of the South, particularly on the east coast of Florida, have called for the mobilization of an army of trained field men to combat the pest. More than twenty-five of the best-informed field agents of the United States Department of Agriculture have been sent out to save the crop, which is under Government contract and essential to war plans. The Federal agents are organizing the farmers and educating them as to the best ways of routing the worms, and state officials are co-operating.

Heavy Chemical Markets

CHEMICAL PRICES TENDING UPWARD

Bleaching Powder Advances Sharply—Caustic Soda and Soda Ash Holding Firm—Quotations on Acids Nominal—Little Reaches the Open Market

PRICE CHANGES IN NEW YORK
(Stocks in First Hands)

Advanced

Potassium Lump Alum, ¼c lb.
Potassium Ground Alum, ¼c lb.
Aluminum Hydrate, Light, ½c lb.
Aluminum Hydrate, Heavy, ¾c lb.
Ammonia, Anhydrous, ½c lb.
Aluminum Sulphate, High Test, ½c lb.
Bleaching Powder, Domestic Drums, ¼c lb.
Bleaching Powder, Export Drums, ½c lb.
Copper Sulphate, 98-99 p.c. ½c lb.
Carbon Tetrachloride, ½c lb.
Copperas, 10c per 100 lbs. Works
Nickel Oxide, Single, 1c lb.
Caustic Potash, 88-82, 1c lb.
Caustic Soda, 5c per 100 lbs.
Soda Ash, Bags, 5c per 100 lbs.
Soda Ash, Barrels, 10c per 100 lbs.

Declined

Phosphorus, Red 3c lb.
Phosphorus, Yellow, 1c lb.
Oxalic Acid, 1½c lb.
Tin Oxide, 5c lb.

In reviewing the local heavy chemical market for the interval it is noted that the general firm condition reported a week ago continues to hold and at the close a number of important price revisions upward had taken place. The sharpest and most important advance has doubtless been on bleaching powder, especially for export drums. The domestic call, as well as that from South America, continues unusually brisk for this season of the year and in some quarters it is stated that spot supplies are now hard to locate. The market leaders, caustic soda and soda ash, have held in their former advanced position and a number of sellers were quoting slightly higher at the close on both of these important heavy chemicals. Practically the entire acid production is controlled now by the Government, and for the most part prices continue entirely nominal with few stocks reaching the open market.

The condition in virtually the entire list of chemicals is said to be stronger for this season of the year than has been noted in a long time, and the general tendency seems to be toward higher levels all along the line. There have, of course, been some exceptions, but they were relatively minor cases.

Taking the most important items in their order it is noted that bicarbonate of soda continues to be a scarce commodity at nominal figures, and practically the same condition is true of silicate grades, this is due, it is said, to a shortage of supplies. Dye producers are in the local market heavily for sulphite of soda which is used extensively in sulphur dyes. The consumer demand from the majority of large users of aluminum sulphate is apparently increasing from day to day and holders of large quantities of the high test have advanced their price. Supplies of either the high test or the commercial are said to be only moderate.

Although prices are quotably unchanged on the various grades of acetate of lead, the inquiry is said to be improving and additional underlying strength is noted to the local situation. Another heavy chemical that has responded to the upward movement of prices has been caustic potash, with the majority of holders quoting at least 1c higher on the pound. Nothing new is to be reported on the prussiates of potash. Sellers are quoting at the high levels recently named and there is little indication of any weakening since it is stated that supplies are barely sufficient to take care of the business being placed.

Acid, Acetic—It appears now that manufacturers are only doing business with buyers answering the requirements of the Government's questionnaire, and this is gradually bringing the disposal of all grades of acetic under Government regulation. Offerings by second hands have long since been well absorbed, and there are relatively only small stocks to be found now, though sellers of these continue to ask prices considerably higher than those that were set by the War Industries Board. For instance small offerings on the Glacial have been reported on the market from second hands as high as 50c a pound, while the price fixed by Government was 9½c a pound, but the Government's present fixed price has nothing to do with whatever "free" material there may be on the market, but it is only in cases where users are in urgent need of supplies that they are willing to pay the high prices named for "free" acetic.

Acid, Muriatic—Demand and inquiry for all grades of muriatic acid are still very heavy, and manufacturers are unable to supply the constant call. They have likewise been unable to solve the question of containers, with drums still advancing in price and very scarce. Where figures were obtainable on the 20-degree material they were at about unchanged levels of 2½c to 3c a pound, with the 22-degree muriatic quoted at 2⅞c to 3⅛c a pound. The condition for the most part is entirely nominal as few actual offerings have been made during the week. Several small parcels of the 18-degree have been passed at 2c to 2½c a pound, according to quantity.

Acid, Nitric—It appears now that the majority of consumers are receiving supplies direct from manufacturers, and the latter are working at full capacity to supply consumers working on essential lines of industry. As a matter of fact Government regulations rule now in this market, and there are practically no stocks left in second hands. It is almost impossible now to get a quotation in the open market. The Government is taking the bulk of the production for the manufacture of munitions.

Acid, Sulphuric—Producers of this acid continue to deal with consumers direct on the basis of recently set Government prices, and then only with consumers working on essential lines. The demand from all quarters is still enormous, and far heavier than the current production. Offerings of sulphuric by second hands have been negligible in the local market. Few prices are heard of "free" goods. It is understood that the Government is taking the best care it can of urgent calls under the prevailing circumstances. Plants throughout the country are working overtime in an endeavor to take care of the large requirements from Washington.

Alums—General firmness in the spot market is noted on all grades of alums and in some instances factors are not quoting on spot stating that they are sold up. Quotations are being made on stocks for future delivery and the range of prices is comparatively high. Additional strength is noted all along the line for spot and there is nothing to indicate at this writing that there will be any immediate or material decline. One of the reasons advanced for the present firmness is the shortage of labor and it is pointed out that in

view of increasing demands from workers there is little likelihood of any material weakness. Closing quotations for spot and over the balance of the month were 5c to 5⅛c a pound for ammonium lump; 9¼c to 9¾c a pound for potassium lump; 19¼c to 20½c a pound for potassium chrome, and 20½c to 21½c a pound for ammonium chrome.

Aluminum Sulphate—Closing quotations were 3¼c @ 3½c a pound for the high test aluminum sulphate, and from 2c to 2½c a pound for the low test, or commercial grade. In some directions sellers were asking slightly higher prices especially for the high test, but at the same time a number of sales have been made at the quotations named above, with additional stocks held, subject to prior sale. For the most part the New York market has been steady for both the high and low test of this heavy chemical, and with supplies in the spot market only moderate there is little reason to look for any material downward movement in prices. It is stated that the cost of production is apparently increasing daily and this is one of the reasons advanced for the firm condition that is reported from practically every quarter.

Bleaching Powder—Leading factors in the New York market state that not in a long time has there been the activity in bleaching powder that is noted at the present time. At this writing prices are higher than they were a week ago, and judging from the underlying strength to the situation there is every reason to believe that the upward movement will continue. For stocks in domestic drums prevailing prices were from 2¼c to 2½c a pound, and in some directions even higher prices have been heard. For stocks in export drum prices ranged from 2¾c to 3⅛c a pound, with some asking as high as 3½c a pound. There is quite a wide range noted in prices in this market for the reason that spot supplies are now getting low, with little prospect that there will be any additional large stocks placed on the market. The call from consumers in South America is particularly strong. It is also learned that the Government may at any time commandeer the entire production and fix a price as it has done with many other heavy chemicals.

Copper Sulphate—A number of inferior grades of this material continue to be offered on the open market, but these stocks are not attracting a great deal of attention on the part of users, and closing quotations in the spot market for the standard 98-99 per cent. crystals were from 9¼c to 9¾c a pound, depending upon quantity and buyer. The demand is steady and the inquiry continues active, with supplies on spot only moderate. In the main prices have held firm and in some quarters slightly higher quotations have been heard.

Lead Acetate—A great deal of interest continues to be manifested on all varieties of acetate of lead, and as was the case a week ago, there is not a great deal of inclination on the part of important factors to do a great deal of quoting beyond the end of the present month. Prices in the spot market are about as they were a week ago at 15¾c @ 16⅛c a pound for the broken brown; 17⅛c @ 17½c a pound for the white crystals; 16c @ 16½c a pound for the broken cakes, and 17¼c to 18⅛c a pound for the granulated.

Potash, Caustic—The local market has been more active during the week. Prices have not changed materially, however, since there appear to be sufficient quantities on hand to take care of a greater volume of orders. Much interest is centering on positions for the early Fall and judging from quotations heard sellers are looking for a firm market. Closing quotations for spot and nearby stocks were 74½c @ 76¾c a pound for the high test, and from 61c to 62c a pound for the low test or commercial grade, according to quantity and buyer.

Potassium Prussiate—Firmness continues to be reported on every hand for this heavy chemical. There have been a few offerings of the Oriental grades during the week, but they have not been large and importers had little trouble in disposing of these stocks at comparatively high prices since the demand for the Japanese prussiates is still far in excess of the supply. The domestic stocks are only moderate and prices are firm at $1.18 @ $1.25 a pound for the yellow, and $1.85 to $1.95 a pound for the red.

Soda, Caustic—Comparatively speaking there has been a fairly good demand for caustic soda during the week and although prices are unchanged at $4.20 to $4.40 per hundred pounds, the undertone of the market is decidedly firmer since there has apparently been considerable improvement in the inquiry of late. Supplies,, while not particularly abundant are still sufficient to handle more spot business. Early in the week it was learned that a car from local store passed at $4.10 per hundred pounds, but this was considered a low price and slightly under the market. From one source it was learned that a standard brand rolling to New York was quoted at $4.10 per hundred pounds, f. o. b. New York, and at the same time other stocks rolling east are quoted at higher levels. Material from Western works for shipment to the Pacific coast was reported in the neighborhood of $4.00 per hundred pounds. Contracts over 1919 are quoted at $3.75 per hundred pounds, basis works.

Soda Ash—An active demand and strong inquiry for soda ash, especially from Western works. In the local market prices generally heard for stocks in bags range from $2.30 to $2.50 per hundred, while double bags are held at $2.80 per hundred pounds, and up. The market in Philadelphia is particularly strong with dense ash in barrels $3.80 per hundred pounds, for shipment to New York freight allowed. In New York the prevailing quotation for light ash in barrels is from $2.90 to $3.15 per hundred pounds, according to quantity and buyer. In summing up the local situation on soda ash it is noted that the demand from all quarters is more active than it has been for some time and factors are optimistic over the increased inquiry.

TOLUOL PLANT IN ALABAMA

The Birmingham Coke and By-Products Company, Birmingham, Ala., has begun the construction of a plant for the manufacture of chemicals and to supply coke to the Government. The capacity will be 700 to 720 tons of coke daily, with 250 men employed, and carrying a daily pay roll of $1,000. Coke from this plant will be furnished the Government air nitrates plant at Sheffield.

The by-products include toluol ammonia, solvent naphtha, etc.

Officers of the company are: M. W. Bush, President; H. Hammond, Vice-President and Treasurer, and H. L. Morrow, Secretary. A. P. Bush, of Mobile, is also connected with the enterprise.

The Imperial Coal and Coke Company and the Majestic Coal Company, within three miles of the new plant, will furnish a large amount of the coal used. These two companies own 7,000 acres of coal land with an estimated tonnage of 40,000,000 tons of coking coal.

Announcement was made by the War Trade Board this week that applications will now be considered for the exportation of all commodities to Sweden.

Color & Dyestuff Markets

BRISK MOVEMENT IN DYESTUFFS

Prices Firm With Some Sharp Advances—Benzol, Benzoic Acid, Benzoate of Soda and Ortho-Toluidine Weak—Dye Bases and Dyewoods Still Scarce

PRICE CHANGES IN NEW YORK
(Stocks in First Hands)

Advanced

Cresylic acid, Crude 95-97 p.c. 5c gal.
Solvent Naphtha, Water White, ½c gal.
Acid H. 20c lb.
Aniline Salts, 2c lb.
Annatto, Fine, ¼c lb.
Cochineal, 5c lb.
Logwood Sticks, $3 ton
Logwood, Solid, ½c lb.
Egg Albumen, 5c lb.
Acid Blue, 25c lb.
Acid Orange, 5c lb.
Alizarin Red, S. 50c lb.
Chrysoidine R. 5c lb.
Direct Yellow, 40c lb.
Indigo, 20 p.c. Paste, 25c lb.
Methylene Blue, Tech. 10c lb.
Sulphur Blue, Dom. 10c lb.

Declined

Cresol, U. S. P. ½c lb.
Creosote Oil, 25 p.c. 1½c lb.
Naphthalene Balls, ⅛c lb.
Naphthalene Flake, ⅛c lb.
Benzoic Acid, 10c lb.
Benzoate of Soda, 5c lb.
Alpha-Naphthol, 5c lb.
Ortho-Toluidine, 5c lb.

Despite the intense heat, the week has been active on all important items in the general list, and in the main prices have held firm with a number of sharp advances, the sharpest being on H acid, which has jumped 20c a pound, with the majority of large factors quoting the price as nominal. The most noticeable weak spots have been on benzol, benzoic acid, benzoate of soda and ortho-toluidine, spot prices for which continue to decline in the face of a decidedly slow demand. Continued firmness and decreasing supplies characterize the situation on all dye bases and dyewoods, and some of the most important items were reported as being entirely out of the spot market.

The demand for the various intermediates and the movement of stocks toward important users has been particularly brisk. There has also been a strong inquiry and this has given a great deal of strength to the local condition. Few of the important intermediates are in abundant supply, and because of an apparent larger call for export, holders of spot materials are not inclined to do a great deal of shading.

Not in years has there been such a tight market on dye bases and dyewoods. A careful canvass of the trade has revealed the fact that supplies are now so light on the spot market that the largest importers are unable to quote at all, and there is little inclination on their part to quote on stocks to arrive. It is pointed out that the market is in such a sold-up condition that practically the bulk of these materials is already contracted for and there is little likelihood of any large quantities reaching the open market. Importers still hold to the opinion that the War Industries Board will be compelled to allow more stocks to arrive since the requirements of the Government are increasing with barely sufficient spot stocks to take care of the demand. Cochineal, turmeric, cutch, gambier, quebracho and logwood are reported as being virtually out of the spot market.

Buyers are interested in the scarcer colors which continue in short supply. The items that show the greatest strength are direct yellow, metaline yellow, silk yellow, alizarine red S, chrome and sulphur Khaki, direct black and acid black.

Dye Bases and Dyewoods

Albumen—The Chinese egg albumen continues in active demand with supplies far from ample to take care of the call. Those who have any stocks to offer either on spot or afloat are quoting at $1.25@$1.30 a pound, with some asking up to $1.35 a pound for the month. As a matter of fact trading in the New York market is still limited entirely to grades that are available. The imported blood continues in scant supply with prices practically nominal at 95c a pound, and up. There have been fair arrivals of the domestic blood during the week, but there were ready takers for these materials at prices ranging from 65c@70c a pound, according to quantity. It appears that the condition here continues to tighten with little immediate relief in sight.

Cochineal—It appears that consumers would be willing to pay as much as $1.00 a pound for either the silver Teneriffe or rosy black varieties, but offerings are now so light that the largest importers, for the most part are reluctant to quote any figure at all. The gray black is likewise in light supply, but there have been some stocks offered at 70c a pound, subject to prior sale, of course. Inability of importers to obtain shipping space is preventing the arrival of cargoes of cochineal, and the recent active demand has practically cleaned the local market of stocks entirely. Even the arrival of comparatively small stocks would ease up the situation considerably at this time.

Cutch—Prices for cutch have varied widely during the week, because of speculation in the stocks that have been held in the hands of dealers. The Rangoon in boxes is quoted from 22½c@24c a pound as an actual spot price, while others nominally quote 24c@26c a pound, without offerings, declaring goods to arrive would be held at the lower range. The slab or South American grade is out of the market at this time, and importers say that apparently it will be some time before there will be any liberal spot offerings of this grade on account of the present sold-up condition. Some of the importers of this commodity name 13¾c @15¾c per pound as a nominal price for Borneo cutch on the spot, and 13c a pound and up for stocks to arrive. At the best the entire situation is very much unsettled in view of the light offerings with the demand increasing daily.

Divi Divi—High freight tariffs coupled with the inability of dealers to get stocks into the country under the present shipping conditions has caused holders of spot divi divi to again advance their price to $85 a ton in some instances. In some directions, however, the inside quotation is $80 a ton, but it is understood that only small quantities are involved at the last named figure. It is understood that orders for divi divi are being refused by importers because of their inability to fill them. The demand for this material is strong from large consumers, and in some quarters the opinion was expressed that those in urgent need of supplies would be willing to pay even above $80 a ton if they could locate large quantities on the spot. The movement from primary points continues slow and indications point to higher prices.

Fustic—Spot offerings continue light on all grades of fustic with the general range of prices upward. The

solid is ranging from 28c@29c a pound, where spot quotations are obtainable. Closing quotations for the sticks ranged from $43@$55 a ton, according to quantity and point of origin. $55 is the prevailing quotation for prime Mexican sticks. Fustic chips are unchanged at 3½c@5½c a pound. From 13¾c@14½c a pound were closing figures named in this market on the 51-degree material. In some quarters stocks now leaving primary points are quoted the same as spot.

Gambier—Spot stocks of all grades of gambier are exceedingly low, and it cannot be learned that there have been any offerings of the plantation kind. Where spot has been quoted prices are again higher than they were last week, and as a matter of fact supplies that are to arrive are quoted at about the same figure as spot. Nominally Java cubes are 20c @ 21½c a pound, and the Singapore cubes 30c @ 32c a pound, according to quantity. Stocks of the common to arrive have been quoted at 22½c @ 23c a pound.

Indigo—Prices are unchanged at $2.25 @ $2.75 a pound for the Oudes; $3.00 @ $3.50 a pound for the Bengal; $2.25 @ $2.75 a pound for the Guatemala; 90c @ $1.10 a pound for the Madras, and from 24c to 26c a pound for the paste. The demand is steady, but not particularly pressing at this time and perhaps on firm bids prices could be shaded. Supplies are not abundant, but seemingly sufficient to take care of all the business that is being placed.

Logwood—Supplies of the various items under this heading are far from sufficient to take care of orders, and where figures were obtainable they were decidedly higher than previously noted. The stocks are in especially strong demand and in large quantities it appears that some users would be willing to pay as much as $50 @ $55 a ton for spot. About $45 a ton has been heard for stocks at Southern points, but there is no telling when these sticks would reach the New York market in view of the present transportation situation. The chips are firm at 3½c @ 5½c a pound; the solid at 21c @ 22c a pound; the 51-degree Twaddle at 11c @ 11¼c a pound and the crystals at 21c @ 26c a pound.

Coal-Tar Crudes

Benzol—Apparently there is a slightly better inquiry for this crude, but it is of a routine character with prices weak at 24c @ 25c a gallon, depending on quantity and buyer. Supplies are still abundant and even if some of the slack was taken out of the market by way of a heavier inquiry it is not probable that holders would advance their price materially since there has been a general drumming for business for some time. In one or two quarters 23½c a gallon was named, and perhaps on firm bids as low as 23c a gallon could still be done.

Naphthalene—Prices are slightly off this week on both flake and ball naphthalene since there has been a very slow demand and apparently supplies are sufficiently large to take care of a great deal more business. The prime flake was quoted at 9c @ 9¼c a pound, and the balls at 10c @ 10¼c a pound. Factors say that the lull in buying is not unusual for this season of the year. Users are taking only sufficient stocks for immediate needs.

Phenol—The inquiry for this material has improved during the interval, but prices are without change at 43¾c @ 44½c a pound, according to quantity. It is said that supplies are fully ample to take care of more business and there is little likelihood that there will be any material price advance in spite of the better inquiry. Users are still buying in small quantities.

Toluol—No change is reported on toluol. The demand is so strong that stocks are immediately absorbed as quickly as they are offered. The price of $1.50 @ $1.55 a gallon which was fixed by the War Industries Board continues in force and practically all of the free material has been taken up.

Intermediates

Acid H—This product has been the outstanding feature in the local market for intermediates and stocks are now so scarce that a number of the largest factors say they are sold up. From $3.25 to $3.35 a pound has been the prevailing price for spot and delivery over the month. Not in years has there been the call for H acid as has been noted for several weeks. Such a condition has naturally brought about considerable speculation among dealers. There is so much underlying strength to the situation that there is little reason to look for any immediate decline.

Acid, Naphthionic—While trading has been largely of a routine character it is said there is a better inquiry from consumers especially for delivery early in the Fall. Prices remain at $1.20 @ $1.30 a pound for the refined, and $1.05 @ $1.15 a pound for the crude. Producers are keeping their production just about to the limit to meet the present call.

Acid, Sulphanilic—Following in sympathy with the better inquiry for other intermediates this material is moving in better volume. The bulk of trading, however, continues to be between makers and consumers and little stock is reaching the open market. Prices are unchanged at 42c @ 44c a pound for the refined, and 31c @ 33c a pound for the crude, depending upon quantity and buyer.

Aniline Oil and Salts—Supplies of either the oil or salts are only moderate and there continues a great deal of underlying strength to the situation, especially on the salts. Firmness is still reported on every hand in the spot market and in some quarters holders have again advanced their price. The majority of factors were quoting at 27½c @ 28½c a pound for the oil, drums extra, and from 43c to 45c a pound for the salts. There continues a good export call, particularly from South America.

Benzoate of Soda—Another exceedingly quiet week has passed on both the acid and the soda. It is stated that the large orders expected from the canneries have not materialized and holders have again lowered their price to $2.80 @ $2.95 a pound for the soda and $3.00 to $3.20 a pound for the acid. It is pointed out that supplies are sufficient to take care of a larger volume of business.

Benzidine—A steady condition has been reported on this intermediate with offerings being made at $1.75 @ $1.85 a pound for the base, and $1.40 to $1.50 a pound for the sulphate depending upon quantity and buyer. Factors said at the close that buying interest is keener for both grades.

Dimethylaniline—Little is to be had on the spot and where quotations have been named for shipment they have ranged from 76c to 80c a pound. The call from all directions is heavy.

Para-Amidophenol—Business has picked up slightly, but sellers have not advanced their price materially. Closing figures for spot were $3.80 @ $3.90 a pound for the base and $4.15 @ $4.30 a pound for the hydrochloride.

The plan for merging British Dyes, Ltd., and Levenstein's, Ltd., has been dropped owing to failure of the interests to reach a satisfactory agreement.

It is believed that the two companies will retain their individual organization but may co-operate on certain lines through a joint committee to aid the Government during the war and to meet German competition later.

The Foreign Markets

LONDON OBTAINS FORMALDEHYDE

Serious Situation at Base Hospitals is Relieved—Refined Camphor Firm—Quinine and Cloves Higher—Saccharin Firmer—Citric Acid Easier

(*Special Cable to* DRUG & CHEMICAL MARKETS)

London, Aug. 14—The market is quiet this week. The arrival of liberal supplies of formaldehyde has relieved a serious situation. Such large quantities are used as disinfectant in the hospitals at the front and throughout England that the market had been nearly stripped of large lots. It is believed that the Government has taken steps to prevent a repetition of the shortage.

Refined camphor is very firm. Direct supplies of crude camphor are being withheld by the Japan Monopoly Bureau. It is probable that this action will become the permanent policy of Japan in order to force the export of refined camphor and thereby build up the industry in Japan. Heretofore the crude has been exported in large quantities to Great Britain and America.

Higher prices are quoted this week for quinine, podophyllin, cloves and senega.

There is a firmer tone in salicylates, amidopyrin, phenazone, cascara, balsam tolu, and saccharin.

The market is easier for citric acid, tartaric acid, potassium bicarbonate and phenolphthalein.

IMPORTS OF OIL SEEDS AT HULL

Imports of oil seeds at Hull for the 27 weeks ending July 2, 1918, compared with the corresponding period of 1917, were as follows according to statistics issued by the Hull Chamber of Commerce:

Seed		First six months of 1917	1918
Linseed	quarters	310,559	66,406
Rapeseed	do.	130,072	12,913
Castor beans	do.	83,646	52,445
Cotton seed:			
Egyptian	tons	89,015	17,955
Other	do.	14,583	—
Palm kernels	do.	32,691	2,173
Soya beans	do.	13,890	—
Peanuts	do.	14,564	—

The total imports of oil seeds for the half year was about 537,000 tons less than for the corresponding months of 1917. During the same period importations of oil cake amounted to 700 tons against 22,857 tons in 1917.

Bombay linseed opened at £30 ($146) per ton, the Government-controlled maximum price, and has remained the same up to date. There have been no sales in River Plate linseed.

Egyptian cotton seed opened the year at £19 ($92.46) per ton, the Government-controlled maximum price, where it has remained. There have been no sales in Bombay cotton seed.

Linseed oil has remained at £58 ($282.26) per ton, the Government-controlled maximum price, throughout the six months.

There have been no sales of refined cottonseed oil reported.

Secretary Daniels requests trade publications to eliminate any mention in the advertising or news columns of the sailing or clearances and departure, location or supposed location of ships, not only in American waters but in any other waters. The purpose is to restrict enemy submarine operations on this side of the Atlantic.

Japanese Chemical Exhibit

At a chemical and industrial exhibit recently held in Osaka, Japan, a careful search revealed only one display of imported products. This was a stand showing aniline dyes made by a Swiss firm, and represented by Japanese agents. At the commencement of the European war the Japanese were faced with a serious shortage of drugs and chemicals, so a number of chemical-manufacturing companies rapidly sprang into existence and certain conditions of carrying out research work were encouraged by Government support. A fee of 15 sen was charged for entrance to the exhibition and in spite of the fact that there were no side-shows or entertainments a large number of people visited the place.

What was quickly noticed by the visitor from overseas was the scarcity of descriptive matter in any language but Japanese. Only few exhibitors had their labels printed in English as well as Japanese.

Of the minerals, copper was shown in all forms, and copper salts were shown on a large number of stands. Potash salts seemed to be surprisingly plentiful, a good quantity of bichromates and ferrocyanide in large crystals making attractive exhibits. Sulphuric, hydrochloric, and nitric acids in commercial and pure grades were exhibited by several manufacturers, while red phosphorus, bleaching powder and calcium carbide were seen on many stands.

The display of fine pharmaceutical chemicals was naturally small owing to the high cost of raw material of which a great amount had to be imported. Several firms showed salicylic acid and salicylates, a few also exhibited good samples of aspirin and phenacetin.

A surprising number of dyes were exhibited, scarlets and blues predominating, with several samples of methyl violet and magenta. Many of the large stands were filled with exhibits of soap, chemical apparatus and fancy glass. A few proprietary medicines were to be seen, one of them, of the tonic variety, having a working model which attracted a great deal of attention.

The largest exhibit was that of the Nippon Glycerine Company who made the most of their space by having a complete toilet-soap plant working, as well as a good show of glycerine and fatty-acid soap stock. Although the soap exhibited was of average good quality, it seems that a really high-class soap, delicately perfumed, has yet to be made in Japan.

The fancy glass exhibits were pleasing to the eye, the finely corrugated sheets of glass having the appearance of being backed with satin, and some of them decorated with floral designs were made up into handsome screens. Exhibits of chemical apparatus consisted mostly in acid and heat-proof porcelain ware and glass. Kioto firms appeared to excel in the manufacture of this class of goods.

The general impression gained by a visit to the exhibition was that too many manufacturers had turned their attention to the same chemicals, with the result that there was a great repetition of certain products, while the large field of organic chemistry remained almost untouched.

By royal order the Spanish Government has placed an export duty of 10 pesetas ($1.93 par value) per 100 kilos (220.46 pounds) on common soap. The order became effective the latter part of July.

COST OF COLLECTING THE REVENUE

Washington, D. C., August 12—The work of the Ways and Means Committee on the new revenue bill has resulted in a call upon the Commissioner of Internal Revenue for statistics regarding the work of his Bureau for several years. In response, he has announced that collections during the fiscal year ended June 30, 1918, averaged ten million dollars a day, the total collections for the year being more than $3,650,000,000.

The total of more than three and one-half billions collected last year contrasts strongly with the collections of the fiscal year ended June 30, 1914, the last year before the outbreak of the war, when the Government's revenue from internal taxes amounted to $380,000,000. In 1917, when we were at war, and under the provisions of the income tax law, collections were but $809,000,000, which was considered a record. But the collections of 1917 will be as nothing beside those of this year, when, under the new revenue law, eight billion dollars are to be raised.

Despite the great increase in collections, which necessitated increasing the force of the bureau from 4,500 to 10,000 employes, the cost per hundred dollars of collections has steadily decreased. In 1914, it cost $1.52 to collect each hundred dollars, in 1916, $1.40, in 1917, 95 cents, and in 1918, 33 cents per hundred dollars.

Under the new law, taxes will be payable throughout the year on various items, reducing the work that usually comes at the end of the fiscal year. Thus, this year, the bureau will have to collect 25 million dollars a day in order to raise its total of eight billion dollars. In 1914, the collections amounted to slightly more than one million a day.

OIL-SEED PRODUCTION IN INDO-CHINA

According to M. Brenier, Director of the Chamber of Commerce at Marseilles, France, the resources in oil seeds of Indo-China are of the greatest importance. The chief oil plants under cultivation are the cotton plant, soya bean, castor-oil plant, sesame, peanut and coconut. The castor-oil plant of Tonkin has been found to yield as much as 42 per cent of oil in laboratory experiments but only about 35 per cent in actual practice. Sesame, cultivated in Tonkin and Annam, gives 50 per cent of oil.

Marseilles formerly imported up to 420,000 tons of ground peanuts annually, one-half of which came from Senegal where a yield of 20-29 cwts. per acre was obtained. The light soils of Tonkin, Central Annam, Cochin-China and Cambogia are more favorable and yield up to 49 cwts. per acre. The coconut palm covers nearly 25,000 acres, and is grown chiefly in Annam.

The custom house statistics of Buenos Aires, Argentina, do not indicate the imports of corkwood, corks and cork squares, and cork shavings; they only show the importations of manufactured products of cork (corchos elaborados). In 1913 the importations of these products amounted to 361,101 pounds; in 1914, 212,141 pounds; and in 1915, 243,386 pounds. During the first nine months of 1917 the imports of cork manufactures amounted to 290,472 pounds. Spain exported by far the greatest amount of these articles to this country.

JAPAN'S FUMING SULPHURIC ACID PLANTS

The demand for fuming sulphuric acid in Japan has greatly increased during the war, and until recently the only source has been the Government Arsenal which has released its very limited supply at 4½c per kilo. The quantity set free was quite insufficient to meet the demand and new plants were erected by various firms. The Dai-Nippon Artificial Manure Company decomposes nitre cake at a temperature exceeding 700 degrees C and collects the free sulphur trioxide in a condenser. The Nippon Seimo Seizo Company is about to work one of its own processes with an output of six tons a day.

Notes on New York Imports

J. L. Hopkins & Co. is credited with an importation of 30,200 pounds of insect flowers.

Over 49,000 pounds of nutmegs comprised a recent importation of West Indian nuts by Middleton & Co.

Licorice importations for the past week amounted to 76,000 pounds, and were consigned to J. L. Hopkins & Co.

Lasker & Bernstein received a large importation of sponges, during the week, aggregating about 76,000 pounds.

About 44,000 pounds of crude tartar was recently imported, consigned about equally to the Tartar Chemical Company and Chas. Pfizer & Company.

The Ibero-American Export Co., Inc., received five tons of sage leaves, six to seven tons of rosemary leaves and ten tons of licorice root by a steamer that reached an Atlantic port on August 9.

A. Stallman & Co. received an importation of 23,000 pounds of leaves comprising henna and savory. J. L. Hopkins & Co. are credited with consignments of about 18,000 pounds of senna and over 3,000 pounds of henna.

LIVERPOOL'S CHEMICAL TRADE WITH U. S.

There was a decrease of over $6,000,000 in the value of the articles invoiced at the American consulate in Liverpool, England, for the United States during 1917 compared with 1916. The total value of the declared exports to the United States was $24,065,832 compared with $30,144,189 for 1916.

The shipments of raw materials, which in 1916 amounted to $18,847,955, decreased by $7,232,195; and food products, which in 1916 were $2,941,852, amounted to $1,843,854 the following year. Manufactured goods, on the other hand, increased from $8,200,834 to $10,444,820, a gain of $2,243,986. Among the manufactured goods invoiced at the Liverpool consulate for shipment to the United States in the last two years were the following:

		1916		1917	
Chemicals, drugs and dyes:		Quantity	Value	Quantity	Value
Ammonia sulphate	pounds	1,274,236	$44,824	690,588	$28,308
Ammonia, muriate of	do..	635,835	44,189	1,115,871	119,071
Cochineal	do..	140,934	71,501	29,869	14,136
Cutch	do..	1,796,513	186,641	127,427	12,446
Gum tragasol	do..	781,698	21,006	917,650	33,236
Soda silicate	do..	1,598,383	23,170	811,075	11,489
Soda sulphate	do..	402,756	8,568	753,159	20,396

In the entire list of exports to the United States tin is the only article that shows a noteworthy increase, the total being 17,442,882 pounds, valued at $8,008,408, compared with 13,729,890 pounds, valued at $5,330,665, in 1916. Part of value increase is accounted for by substantial rises in price. Standard tin, for example, at the close of 1916 sold for $866.24 per ton, while on December 31, 1917, it was $1,362.62 per ton. Notwithstanding the conversion of many tin-plate works for munition purposes and the consequent lessening of demand from that quarter, the demand was good in England, while from the United States it held brisk throughout the year. There was a good supply of Nigerian, Bolivian, and English tin, both for home consumption and for exportation, and as a rule export licenses were readily obtainable. Less Straits tin was sent from Liverpool to the United States, the direct importations being correspondingly heavier.

Palm-oil shipments to the United States show an increase of $155,989, due entirely to advanced prices, as the quantity fell from 17,486,262 pounds to 14,541,507 pounds. Government export restrictions, imposed in order to increase glycerine imports from neutral countries, remained in force throughout 1917, and in the fall the granting of export licenses for palm-oil practically ceased. There were no shipments of palm-kernel oil during the year.

Prices Current of Drugs & Chemicals, Heavy Chemicals & Dyestuffs in Original Packages

NOTICE — The prices herein quoted are for large lots in Original Packages as usually Purchased by Manufacturers and Jobbers.

In view of the scarcity of some items subscribers are advised that quotations on such articles are merely nominal, and not always an indication that supplies are to be had at the prices named.

Drugs and Chemicals

Acetanilid, C.P., bbls. bulk	lb.	.75	— .76
Acetone	**lb.**	**.25½**	**— .25¾**
Acetphenetidin	lb.	3.35	— 3.50
***Aconitine, ⅛-oz. vials**	**ea.**	**—**	**— —**
Agar Agar, See Isinglass.			
No. 1	**lb.**	**.85**	**— .86**
No. 2	**lb.**	**.80**	**— .81**
No. 3	**lb.**	**.70**	**— .71**
Alcohol 188 proof	gal.	—	— 4.91
190 proof, U.S.P.	gal.	—	— 4.97
Cologne Spirit, 190 proof	gal.	—	— 5.06
Wood, ref. 95 p.c.	gal.	.91½	— .92
97 p.c	gal.	.94½	— .95
Denatured, 180 proof	gal.	.68	— .69
188 proof	gal.	.69	— .70
Aldehyde	lb.	1.25	— 1.45
Almonds, bitter	lb.	.41	— .45
Sweet	lb.	.28	— .29
Meal	lb.	.35	— .37
Aloin, U. S. P. powd.	lb.	.98	— 1.00
Aluminum (see Heavy Chemicals)	**lb.**	**—**	**— —**
Ambergris, black	oz.	10.00	—14.00
Grey	oz.	22.00	—23.75
Ammonium, Acetate, cryst.	**lb.**	**.80**	**— .85**
Benzoate, cryst., U. S. P.	**lb.**	**—**	**—11.00**
Bichromate, C. P.	**lb.**	**—**	**— 1.20**
Bromide, gran., bulk	**lb.**	**.75**	**— .76**
Carb.Dom.U.S.kegs, powd.	lb.	.14	— .14½
Hypophosphite	**lb.**	**—**	**— 2.15**
Iodide	**lb.**	**—**	**— 4.20**
Molybdate, Pure	**lb.**	**—**	**— 7.00**
Muriate, C. P.	**lb.**	**—**	**— .45**
Nitrate, cryst., C. P.	**lb.**	**.25**	**— .26**
Gran.	**lb.**	**—**	**— .54**
Oxalate, Pure	**lb.**	**—**	**— 1.15**
Persulphate	**lb.**	**—**	**— 1.25**
Phosphate (Dibasic)	**lb.**	**.50**	**— .60**
Salicylate	**lb.**	**1.60**	**— 1.63**
Amyl Acetate, bulk, drums	gal.	5.35	— 5.40
Antimony Chlor. (Sol. butter of Antimony)	**lb.**	**.18**	**— .20**
Needle powder	**lb.**	**.13**	**— .14**
Sulphate, 16-17 per cent. free sulphur	**lb.**	**.35**	**— .72**
Antipyrine, bulk	**lb.**	**19.00**	**—20.00**
Apomorphine Hydrochloride	**oz.**	**—**	**—31.20**
Areca Nuts	lb.	.34	— .39
Powdered	lb.	.44	— .45
Argols	**lb.**	**.16**	**— .18**
***Arsenic, red**	**lb.**	**.65**	**— .66**
†White	lb.	.10	— .11
Atropine, Alk. U.S.P.,1-oz. v.	**oz.**	**—**	**—47.50**
Sulphate, U.S.P., 1-oz. v.	**oz.**	**—**	**—37.50**
Balm of Gilead Buds	lb.	.44	— .64
***Barium Carb. prec., pure**	**lb.**	**—**	**— —**
*Chlorate, pure	lb.	.50	— .60
Bay Rum, Porto Rico	gal.	3.45	— 3.65
St. Thomas	gal.	3.75	— 3.90
Benzaldehyde (see bitter oil of almonds)			
Benzol, See Coal Tar Crudes			
Berberine, Sulphate, 1-oz. c.v.	oz.	2.50	— 3.00
Beta Naphthol (see Intermediates)			
Bismuth, Citrate U.S.P.	lb.	—	— 3.50
Salicylate	lb.	—	— 3.35
Subcarbonate, U.S.P.	lb.	—	— 3.50
Subgallate	lb.	—	— 3.50
Subiodide	lb.	—	— 5.60
Subnitrate	lb.	—	— 3.30
Tannate	lb.	—	— 3.15
Borax, in bbls., crystals	lb.	.07¾	— .08¾
Crystals, U.S.P., Kegs	lb.	.08¾	— .09

*Nominal.
†Fixed Government price

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Bromine, tech., bulk	lb.	.75	— .76
Burgundy Pitch	lb.	.04½	— .05
***Imported**	**lb.**	**—**	**— —**
Cadmium Bromide, crystals	lb.	1.75	— 1.80
Iodide	lb.	—	— 4.40
Metal sticks	lb.	1.50	— 1.60
Caffeine, alkaloid, bulk	lb.	11.75	—12.25
Hydrobromide	lb.	10.70	—12.00
Citrated, U.S.P.	lb.	8.00	— 8.05
Phosphate	lb.	14.00	—15.00
Sulphate	lb.	15.00	—16.00
Calcium Glycerophosphate	lb.	1.85	— 1.90
*Hypophosphite, 100 lbs.	lb.	1.00	— 1.05
Iodide	lb.	—	— 4.10
Phosphate, Precip.	lb.	.34	— .35
Sulphocarbolate	lb.	—	— 1.40
Calomel, see Mercury.			
Camphor, Am. ref'd bbls. bk.	lb.	—	— 1.17½
Square of 4 ounces	lb.	—	— 1.18½
16's in 1-lb carton		—	— 1.21
24's in 1-lb cartons	lb.	—	— 1.20
32's in 1-lb. carton	lb.	—	— 1.20
Cases of 100 blocks	lb.	—	— 1.18
Japan, refined, 2½-lb. slabs	lb.	1.20	— 1.22
Monobromated, bulk	lb.	3.75	— 3.80
Cantharides, Chinese	lb.	.99	— 1.00
Powdered	lb.	1.20	— 1.25
Russian	lb.	4.45	— 4.55
Powdered	lb.	4.55	— 4.65
Carbon disulphide, tech 500 lbs. bulk	lb.	.08½	— .09
Casein, C. P.	lb.	.45	— .49
Cerium Oxalate	lb.	.60	— .62
Chalk, prec. light, English	lb.	.04½	— .04¾
Heavy	lb.	.03¾	— .05
Chloral Hydrate, U S P. crystals, bottles incl'd, 100 lb. lots	lb.	1.58	— 1.60
Charcoal Willow, powdered	lb.	.05½	— .07½
Wood, powdered	lb.	.07	— .09
Chlorine, liquid	lb.	.15	— .24
Chloroform, drums, U.S.P.	lb.	.63	— .65
Chrysarobin, U. S. P.	lb.	5.30	— 5.40
Cinchonidin, Alk. crystals	oz.	—	— 1.05
Cinchonine, Alk., crystals	oz.	—	— .81
Sulphate	oz.	—	— .35
Cinnabar	lb.	—	— 3.45
Civet	oz.	2.50	— 2.70
Cobalt, pow'd (Fly Poison)	lb.	.45	— .49
Oleate	oz.	.85	— .96
Cocaine, Hydrochl. gran.	oz.	11.00	—11.25
cryst., bulk	oz.	11.25	—11.50
Cocoa Butter, bulk	lb.	.25	— .27
Cases, fingers	lb.	.35	— .36

*Nominal.

Codeine, Alk., Bulk	oz.	—	— 9.15
Nitrate, Bulk	oz.	—	— 8.20
Phosphate, Bulk	oz.	6.80	— 6.85
Sulphate, Bulk	oz.	7.30	— 7.35
Collodion, U. S. P.,	lb.	.41	— .45
*Colocynth, Apples, Trieste	lb.	Nominal	
Pulp, U.S.P.	lb.	.48	— .49
Spanish Apples	lb.	.35	— .39
Copper Chloride, pure cryst.	**lb.**	**—**	**— .70**
Oleate, mass, 1-oz. jars, 20 p.c.	**lb.**	**—**	**— 1.65**
Corrosive Sublimate, see Mercury.			
Cotton Soluble	**lb.**	**.78**	**— 1.00**
Coumarin, refined	lb.	32.00	— 34.00
Cream of Tartar, cryst. U.S.P.	lb.	—	— .69
Powdered, 99 p.c.	lb.	—	— .68½
Creosote, U.S.P.	**lb.**	**1.85**	**— 1.95**
***Carbonate**	**lb.**	**26.00**	**—27.60**
Cresol, U.S.P.	**lb.**	**.18**	**— .19**
Cuttlefish Bones, Trieste	lb.	.44	— .46
Jewelers large	lb.	1.70	— 1.75
Small	lb.	1.68	— 1.72
French	lb.	.44	— .46
Dover's Powder, U.S.P.	lb.	2.90	— 3.00
Dragon's Blood, Mass.	lb.	.34	— .60
Reeds	lb.	4.90	— 5.20
Emetine, Alk., 15 gr. vials	ea.	—	— 2.75
Hydrochloride, U.S.P. 15 gr. vials	**ea.**	**—**	**— 1.85**
Epsom Salts (see Mag. Sulph.)			
Ergot, Russian	lb.	1.10	— 1.15
Spanish	lb.	1.00	— 1.05
Ether, U. S. P., 1900	**lb.**	**—**	**— .27**
Washed	**lb.**	**—**	**— .35**
U. S. P., 1880	**lb.**	**.27**	**— .28**
Eucalyptol	lb.	1.35	— 1.45
†Formaldehyde	lb.	—	— .16¼
Gelatin, silver	**lb.**	**1.30**	**— 1.39**
***Gold**	**lb.**	**—**	**— —**
Glycerin, C. P., bulk	**lb.**	**—**	**— —**
Drums and bbls., added.	lb.	.61	— .61½
C.P. in cans	lb.	.63	— .63½
Dynamite, drums included.	lb.	.61½	— .62
Saponification, loose	lb.	.46½	— .47
Soap, Lye, loose	lb.	.42	— .42¾
Grains of Paradise	lb.	1.35	— 1.45
Guaiacol, liquid	lb.	19.90	—22.00
Guarana	**lb.**	**1.00**	**— 1.05**
Haarlem Oil, bottles	gross	8.45	— 8.95
Hexamethylenetetramine	lb.	1.10	— 1.15
Hops, N. Y., 1917 prime	**lb.**	**.45**	**— .50**
Pacific Coast, 1917, Prime	**lb.**	**.23**	**— .24**
Hydrogen Peroxide, U.S.P., 10 gr. lots			
4-oz. bottles	**gross**	**—**	**— 7.50**
12-oz. bottles	**gross**	**—**	**—16.50**
16-oz. bottles	**gross**	**—**	**—20.00**
Hydroquinone	lb.	2.70	— 3.00
Ichthyol	**lb.**	**—**	**— —**
Iodine, Resublimed	**lb.**	**4.25**	**— 4.30**
Iodoform, Powdered, bulk	**lb.**	**—**	**— 5.00**
Crystals	**lb.**	**—**	**— 5.55**
Iron Citrate, U.S.P.	lb.	—	— 1.00
Phosphate U.S.P.	lb.	—	— .99
Pyrophosphate, U.S.P.	lb.	—	— .99
Isinglass, American	lb.	.80	— .81
Russian	lb.	7.45	— 7.75
See Agar Agar			
Kamala, U. S. P.	**lb.**	**3.20**	**— 3.25**
Kola Nuts, West Indies	lb.	.29	— .34
Lanolin, hydrous, cans U.S.P.	lb.	.39	— .43
Anhydrous, cans	lb.	.49	— .51
Lead Iodide, U.S.P	lb.	—	— 2.95
Licorice, Mass, Syrian	lb.	.29	— .30
***Sticks, bdls. Corigliano**	**lb.**	**.49**	**— .50**
Lupulin	lb.	1.05	— 2.90
Lycopodium, U. S. P.	lb.	1.60	— 1.65
Magnesium Carb. U.S.P. bbls. lb.		.20	— .21
Glycerophosphate	lb.	—	— 4.55
Hypophosphite	lb.	1.65	— 1.70
Iodide	lb.	—	— 4.85
Oxide, tins light	**lb.**	**—**	**— 1.10**
Peroxide, cans	lb.	—	— 2.15
Salicylate	lb.	1.30	— 1.37
Sulphate, Epsom Salts, tech 100-lbs.		3.37	— 3.45
U. S. P. 100-lbs.		**3.62**	**— 3.85**
Manganese Glycerophos	**lb.**	**4.50**	**— 4.70**
Hypophosphite	lb.	1.65	— 1.70
Iodide	lb.	—	— 4.85
Peroxide	lb.	.75	— .80
Sulphate, crystals	lb.	.60	— .67
Manna, large flake	lb.	.81	— .86
Small flake	lb.	.62	— .65
Menthol, Japanese	lb.	3.45	— 3.50

*Nominal.
†Govt. fixed price.

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Mercury, flasks, 75 lbs.		—	—125.00
Bisulphate	lb.	—	— 1.53
Blue Mass	lb.	—	— .95
Powdered	lb.	—	— .97
Blue Ointment, 30 p.c.	lb.	—	— .93
50 p.c.	lb.	—	— 1.30
Calomel, American	lb.	—	— 2.00
Corrosive Sublimate cryst.	lb.	—	— 1.84
Powdered, Granular	lb.	—	— 1.79
Iodide, Green	lb.	—	— 4.25
Red	lb.	—	— 4.35
Yellow	lb.	—	— 4.25
Red Precipitate	lb.	—	— 2.19
Powdered	lb.	—	— 2.26
White Precipitate	lb.	—	— 2.29
Powdered	lb.	—	— 2.34
Methylene Blue, medicinal	lb.	15.00	—17.00
Milk, powdered	lb.	.16	— .19
Mirbane Oil, refined, drums	lb.	.17½	— .19½
Morphine, Acet. bulk	oz.	—	—11.80
Sulphate, bulk	oz.	—	— 11.80
Diacetyl, Hydrochloride, 5-oz. cans	oz.	—	—15.90
Moss, Iceland	lb.	.25	— .26
Irish	lb.	.11	— .13
Musk, pods, Cab	oz.	12.00	—12.25
Tonquin	oz.	24.00	—25.00
Grain Cab	oz.	18.50	—18.95
Tonquin	oz.	38.00	—39.00
Druggists	oz.	—	—
*Synthetic	lb.	29.90	—30.00
Naphthalene, See Coal Tar Products.			
Nickel and Ammon. Sulphate	lb.	—	— .22
Sulphate	lb.	.27	— .29
Novocain (See Procaine)	lb.	—	— —
Nux Vomica, whole	lb.	.15	— .15½
Powdered	lb.	.18	— .19
*Opium, cases, U.S.P.	lb.	—	—22.50
Granular	lb.	—	— 24.50
Powdered, U.S.P.	lb.	—	—24.00
Oxgall, pure U.S.P.	lb.	1.50	— 1.55
Papain	lb.	4.70	— 5.25
Paraffin White Oil, U.S.P. gal.		3.10	— 3.60
Paris Green, kegs	lb.	.43	— .44
Petrolatum, light amber bbls.	lb.	.05½	— .07
Cream White	lb.	.07½	— .08
Lily White	lb.	.13	— .14
Snow White	lb.	.15	— .15½
Phenolphthalein	lb.	5.50	— 6.00
*Phosphorus, yellow	lb.	—	— —
Red	lb.	1.70	— 1.80
Pilocarpine	oz.	16.00	—20.00
Piperin	lb.	13.00	—18.00
Poppy Heads	lb.	.95	— 1.40
Potassium acetate	lb.	1.50	— 1.55
Bicarb.	lb.	1.20	— 1.40
Bisulphate	lb.	.45	— .60
C. P.	lb.	.75	— .85
Bromide, (Bulk, gran.)	lb.	1.25	— 1.26
Chromate, crystals, yellow, tech. 1-lb. c. b. 10	lb.	—	— 1.05
Citrate, bulk	lb.	—	— 1.60
Glycerophosphate, bulk	oz.	—	— 1.45
Hypophosphite, bulk	oz.	2.15	— 2.20
Iodide, bulk	lb.	—	— 3.75
Lactophosphate	oz.	—	— .25
Permanganate, U.S.P.	lb.	1.45	— 2.00
Salicylate	lb.	2.00	— 3.75
Sulphate, C.P.	lb.	1.11	— 1.16
Tartrate, powdered	lb.	1.31	— 1.32
Procaine, oz. bottles		7.00	— 7.50
5 gr. bottles		1.50	— 1.60
Quinine, Bisulphate, 100 oz. tins	oz.	—	— .90
Sulphate, 100 oz. tins	oz.	—	— .90
50-oz. tins	oz.	—	— .91
25-oz. tins	oz.	—	— .92
5-oz. tins	oz.	—	— .94
1-oz. tins	oz.	—	— .98
Second Hands Java	oz.	1.00	— 1.05
Second hands, American	oz.	1.05	— 1.10
*Amsterdam	oz.	—	— —
*German	oz.	—	— —
*Java	oz.	—	— —
Quinidine Alk. crystals, tins	oz.	—	— 1.06
Sulphate, tins	oz.	—	— .70
Resorcin crystals, U.S.P.	lb.	7.75	— 8.00
Rochelle Salt, crystals, bxs.	lb.	—	— .45
Powdered, bbls.	lb.	—	— .44½
Saccharin, U.S.P., soluble	lb.	38.00	—40.00
U. S. P., Insoluble	lb.	35.00	—37.00
Salicin, bulk	lb.	16.00	—17.00
Salol, U.S.P., bulk	lb.	—	— 1.50
Sandalwood	lb.	—	— .60
Ground	lb.	—	— .65
Santonin, cryst., U.S.P.	lb.	—	—47.00
Powdered	lb.	—	—47.50
Scammony, resin	lb.	—	— —
Powdered	lb.	—	— —

*Nominal.

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Seidlitz Mixture, bbls.	lb.	—	— .34½
Silver Nitrate, 500-oz lots.	oz.	—	— .99⅝
Soap, Castile, white, pure.	lb.	.70	— .75
Marseilles, white	lb.	.17	— .18
Green, pure	lb.	.17	— .18
Ordinary	lb.	.14	— .15
Sodium, Acetate, U.S.P., gran.	lb.	.25	— .29
Benzoate, gran. U.S.P.	lb.	2.80	— 2.90
Bicarb. U.S.P., powd., bbls.	lb.	.02½	— .03
Bromide, U.S.P., bulk	lb.	.65	— .66
Cacodylate	oz.	2.50	— 3.50
Chlorate, U.S.P. 8th Rev. crystals, c. b. 10	lb.	—	— .20
Granular c. b. 10	lb.	—	— .22
Citrate, U.S.P., cryst.	lb.	—	— .67
Granular, U.S.P.	lb.	—	— .77
Glycerophosphate, crystals.	lb.	2.15	— 2.20
Hypophosphite, U.S.P.	lb.	1.10	— 1.15
Iodide, bulk	lb.	—	— 3.90
Phosphate, U.S.P., gran.	lb.	—	— .13
Recryst.	lb.	.17	— .18
Dried	lb.	.25	— .26
Salicylate, U.S.P.	lb.	.92	— 1.00
Sulph. (Glauber's Salt)	lb.	—	— .12
Tungstate	lb.	—	— —
Spermaceti, blocks	lb.	.27	— .28
Spirit Ammonia, U. S. P.	lb.	.45	— .55
Aromatic, U. S. P.	lb.	.47	— .50
Nitrous Ether, U. S. P.	lb.	.48	— .49
Ether Comp.	lb.	—	— 1.65
Storax, liquid cases	lb.	3.60	— 4.60
Strontium Bromide, bulk	lb.	.75	— .76
Iodide, bulk	lb.	—	— 3.50
Nitrate	lb.	.24	— .29
Salicylate, U.S.P.	lb.	1.25	— 1.30
Strychnine Alkd., cryst.	oz.	—	— 1.80
Acetate	oz.	—	— 1.80
Nitrate	oz.	—	— 1.80
Sulphate, crystals, bulk	oz.	—	— 1.40
Sugar of Milk, powdered	lb.	.51	— .52
Sulphonal, 100 oz. lots		1.25	— 1.50
Sulphonethylmethane, U.S.P.	lb.	15.00	—16.00
Sulphonmethane, U.S.P.	lb.	16.00	—16.75
Sulphur, bbls.	100 lbs.	—	— 2.35
Flour com'l bags	100 lbs.	—	— 2.25
Flowers	100 lbs.	4.05	— 4.25
Tamarinds, bbls.	lb.	.10	— .11
Kegs	per keg	4.95	— 6.40
Tartar Emetic, tech.	lb.	.67	— .67½
U. S. P.	lb.	.73	— .73½
Terpin Hydrate	lb.	.49	— .50
Thymol, crystals, U.S.P.	lb.	13.00	—13.50
Iodide, U.S.P., bulk	lb.	16.00	—17.00
Tin, bichloride, bbls.	lb.	.28	— .29
Oxide, 500 lb. bbls.	lb.	1.00	— 1.05
Toluol. See Coal Tar Crudes.			
*Turpentine, Venice, True	lb.	4.60	— 4.65
Artificial	lb.	.07	— .08
Spirits, see Naval Stores.			
Vanillin	oz.	.80	— .84
Witch Hazel Ext., dble dist., bbl.	gal.	1.18	— 1.23
Zinc Carbonate	lb.	.21	— .23
Chloride	lb.	.14½	— .15
Iodide, bulk	lb.	—	— 4.00
Metallic, C. P.	lb.	.45	— .75
Oxide, U.S.P., bbls.	lb.	.34	— .36

*Nominal.

Acids

Acetic, 28 p.c.	lb.	.17	— .17¾
*Glacial	lb.	.19½	Gov. pr.
Acetyl-salicylic	lb.	2.50	— 2.75
*Benzoic, from gum	lb.	—	— —
U. S. P. ex toluol	lb.	3.00	— 3.25
Boric, cryst., bbls	lb.	.13¼	— .15
Powdered, bbls.	lb.	.13½	— .15
Butyric, Tech., 60 p.c.	lb.	1.45	— 1.55
Camphoric	lb.	4.30	— 4.45
*Carbolic crys., U.S.P., drs.	lb.	.45¾	— .46¾
1-lb. bottles	lb.	.52⅜	— .53
5-lb. bottles	lb.	—	— .56
50 to 100-lb. tins	lb.	—	— .54½
Chromic, U.S.P.	lb.	1.25	— 1.50
Chrysophanic	lb.	6.20	— 6.35
Citric, crystals, bbls.	lb.	.82	— .82½
Powdered	lb.	.82½	— .83
Second hands	lb.	.92	— .92½
Cresylic, 95-100 p.c.	gal.	1.05	— 1.15
Formic, 75 p.c., tech	lb.	.36½	— .38
Gallic, U.S.P., bulk	lb.	1.55	— 1.60
Glycerophosphoric	lb.	3.45	— 5.00
Hydriodic, sp. g. 1,150	oz.	.25	— .30
Hydrobromic, Conc.	lb.	2.40	— 2.45
Hydrocyanic, 2 p.c. U.S.P.	lb.	.18	— .20
Hydrofluoric, 48 p.c. C.P.	lb.	1.20	— 1.25
Hydrosilicofluoric, 10 p.c. tech.	lb.	.40	— .45
20 p.c. tech.,	lb.	.50	— .60
Hypophosphorous, 50 p.c.	lb.	—	— 2.50
U. S. P. 10 p.c.	lb.	.65	— .70
Lactic, U.S.P. VIII	lb.	2.15	— 2.25
U. S. P., IX	lb.	2.50	— 2.60
Molybdic, C.P.	lb.	6.90	— 7.40
Muriatic 20 deg. carboys	lb.	Nominal	
Nitric, 42 deg. carboys	lb.	.08½	Gov. pr.
Nitro Muriatic	lb.	.20	— .23
Oleic, purified	lb.	.23	— .28
Oxalic, cryst., bbls.	lb.	.46	— .50
*Picric, kegs	lb.	—	— —
Phosphoric, 85-88 p.c. syrupy U. S. P.	lb.	.45	— .50
50 p.c. tech.	lb.	.35	— .40
Pyrogallic, resublimed	lb.	3.20	— 3.45
Crystals, bottles	lb.	2.70	— 2.85
Pyroligneous, purified	lb.	—	— .06
Technical	gal.	.12	— .12½
Salicylic, Bulk, U.S.P.	lb.	1.10	— 1.15
Stearic, triple pressed	lb.	.26	— .28
Sulphuric, C.P.	lb.	.07	— .08
66 deg. tech f.o.b. wks.	ton	28.00	Gov. pr.
*Sulphurous	lb.	—	— —
Tannic	lb.	1.25	— 1.30
U.S.P., bulk	lb.	1.48	— 1.52
Tartaric Crystals, U.S.P.	lb.	.86	— .87
Powdered, U.S.P.	lb.	.85	— .86
Trichloracetic, U.S.P.	lb.	4.40	— 4.50

Essential Oils

Almond, bitter	lb.	12.90	—13.00
Artificial, chlorine traces.	lb.	5.15	— 5.40
Free from chlorine	lb.	5.25	— 5.50
Amber, crude	lb.	2.30	— 2.40
Rectified	lb.	2.20	— 2.40
Anise	lb.	1.10	— 1.20
Bay	lb.	2.80	— 3.00
Bergamot	lb.	5.45	— 5.55
Synthetic	lb.	3.65	— 4.00
Bois de Rose	lb.	4.90	— 5.30
Cade	lb.	1.10	— 1.15
Cajuput, bottle, Native, cs.	lb.	.80	— .85
Camphor, heavy gravity	lb.	.12	— .18
Japanese, white	lb.	22	— .23
Caraway, Rectified	lb.	8.50	— 8.60
Cassia, 75-80 p.c. tech.	lb.	2.20	— 2.30
Lead, Free	lb.	2.40	— 2.45
Redistilled, U. S. P.	lb.	2.75	— 2.80
Cedar Leaf	lb.	1.15	— 1.20
Cedar Wood	lb.	.20	— .21
*Cinnamon, Ceylon, heavy	lb.	20.50	—22.00
Citronella, Ceylon, drums	lb.	.49	— .50
Java	lb.	.65	— .66
Cloves, can	lb.	3.25	— 3.30
Bottles	lb.	3.35	— 3.40
Copaiba	lb.	1.10	— 1.15
Coriander	lb.	22.75	—23.25
Cubebs	lb.	7.50	— 7.60
Cumin	lb.	10.10	—11.50
Erigeron	lb.	2.30	— 2.40
Eucalyptus, Australian	lb.	.55	— .57
Fennel, sweet	lb.	3.60	— 4.00

*Nominal.

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Geranium, Rose Algerian	lb.	9.00	— 9.75
Bourbon (Reunion)	lb.	9.00	— 9.50
Turkish	lb.	4.75	— 5.00
Ginger	lb.	8.25	— 8.50
Gingergrass	lb.	—	—
Hemlock	lb.	1.25	— 1.30
Juniper Berries, rect.	lb.	12.50	—12.75
Twice rect	lb.	14.00	—14.25
Wood	lb.	1.90	— 3.75
Lavender Flowers	lb.	5.65	— 5.75
Garden	lb.	.75	— 1.05
Spike	lb.	1.10	— 1.35
Lemon, U.S.P.	lb.	1.15	— 1.50
Lemongrass, Native	lb.	1.40	— 1.50
Limes, Expressed	lb.	5.75	— 5.85
Distilled	lb.	2.25	— 2.30
Linaloe	lb.	5.00	— 5.10
Mace, distilled	lb.	2.40	— 2.50
Mustard, natural	lb.	—	—
Artificial	lb.	24.00	—24.25
Neroli, bigarade	lb.	80.00	—90.00
Petale	lb.	90.00	—95.00
Artificial	lb.	24.00	—24.25
Nutmeg	lb.	2.40	— 2.45
Orange, bitter	lb.	2.35	— 2.40
Sweet, West Indian	lb.	1.90	— 1.95
Italian	lb.	2.50	— 2.75
Orris Concrete	oz.	5.00	— 5.05
Origanum, Imitation	lb.	.40	— .50
Patchouli	lb.	30.00	—30.25
Pennyroyal	lb.	1.75	— 1.85
Imported	lb.	1.20	— 1.30
Peppermint, tins	lb.	3.20	— 3.25
Bottles	lb.	3.30	— 3.40
Bulk	lb.	3.35	— 3.50
Petit Grain, So. America	lb.	3.25	— 3.40
French	lb.	7.00	— 8.00
Pinus Sylvestrus	lb.	5.50	— 5.60
Pumilio		—	— 5.00
Rose, French	oz.		—28.00
Synthetic	oz.	2.60	— 3.00
Rosemary, French	lb.	1.10	— 1.15
Safrol		.45	— .47
Sandalwood, East India	lb.	13.50	—13.75
*Sassafras, natural	lb.	2.30	— 2.40
Artificial	lb.	.40	— .45
Savin	lb.	7.00	— 7.25
Spruce	lb.	1.10	— 1.15
Spearmint	lb.	3.75	— 3.85
Tansy, Amer.	lb.	3.50	— 3.60
Thyme, red, French	lb.	2.00	— 2.10
White, French	lb.	2.00	— 2.10
*Wine, Ethereal, light	lb.	—	— —
Wintergreen, leaves, true	lb.	5.00	— 5.10
Birch, Sweet	lb.	2.75	— 3.00
Synthetic, U.S.P., bulk	lb.	.85	— .90
Wormseed	lb.	11.25	—11.75
Wormwood, Dom.	lb.	4.50	— 4.75
Ylang Ylang, Bourbon	lb.	18.00	—18.50
Manila	lb.	40.00	—41.00
Artificial	lb.	12.00	—13.00

OLEORESINS

Aspidium (Malefern)	lb.	17.50	—18.00
Capsicum, 1-lb. bottles	lb.	4.50	— 5.50
Cubeb	lb.	7.00	— 7.25
Ginger	lb.	3.50	— 3.60
*Parsley Fruit (Petroselinum)	lb.	6.75	— 7.50
Pepper, black	lb.	6.50	
Malefern	lb.	12.00	—12.20
Mullein (so-called)	lb.	5.00	— 5.25
Orris, domestic	lb.	4.00	— 4.50
Imported	lb	—	—20.00

Crude Drugs

BALSAMS

Copaiba, Para	lb.	.60	— .64
South American	lb.	.81	— .82
Fir, Canada	lb.	5.30	— 6.00
Oregon	gal.	1.70	— 1.75
Peru	lb.	3.45	— 3.50
Tolu	lb.	1.00	— 1.05

BARKS

Angostura	lb.	.38	— .39
Basswood Bark, pressed	lb.	.18	— .21
Blackhaw, of root	lb.	.29	— .34
of Tree	lb.	.21	— .22
Buckthorn	lb.	.22½	— .23½
Calisaya	lb.	.73	— .85
Cascara Sagrada	lb.	.17	— .19
Cascarilla, quills	lb.	.20	— .23
Siftings	lb.	.11¾	— .13½
Chestnut	lb.	.09	— .10

*Nominal.

WHERE TO BUY

Antoine Chiris Co.
NEW YORK
IMPORTERS & MANUFACTURERS
ESSENTIAL OILS
SYNTHETIC CHEMICALS

Fritzsche Brothers
New York
ESSENTIAL - OILS

Cinchona, red quills	lb.	.99	— 1.20
Broken	lb.	.84	— .95
*Yellow "quills"	lb.	—	— —
*Broken	lb.	.74	— .81
*Loxa, pale, bs	lb.	—	— —
Powdered, boxes	lb.	—	— —
*Maracaibo, yellow, powd.	lb.	—	— —
Condurango	lb.	.10½	— .11½
Cotton Root	lb.	.12	— .13
Cramp (true)	lb.	.50	— .52
Cramp (so-called)	lb.	.11	— .12
Dogwood, Jamaica	lb.	.07	— .10
Elm, grinding	lb.	.09½	— .10
Select bdls.	lb.	.17½	— .19½
Ordinary	lb.	.08	— .10
Hemlock	lb.	.07	— .07½
Lemon Peel	lb.	.10	— .11
Mezereon	lb.	.22½	— .24
Oak, red	lb.	.06½	— .07
White	lb.	.04½	— .05
Orange Peel, bitter	lb.	.05½	— .06
Malaga, sweet	lb.	.12	— .13½
Trieste, sweet	lb.	.12½	— .13
Prickly Ash, Southern	lb.	.13	— .15
Northern	lb.	.14	— .16
Pomegranate of Root	lb.	.39	— .42
of Fruit	lb.	.30	— 31
*Quebracho	lb.	—	— —
Sassafras, ordinary	lb.	.11½	— .13½
Select	lb.	.17	— .19
Simaruba	lb.	.58	— .64
*Soap, whole	lb.	.16	— .18
Cut	lb.	.17	— .19
Crushed	lb.	.13	— 13½
Wahoo, of Root	lb.	.41	— .43
of Tree	lb.	.19	— .20
Willow, Black	lb.	.07	— .08
White	lb.	.15	— .15½
White Pine	lb.	.06½	— .07
White Poplar	lb.	.04	— .04½
Wild Cherry	lb.	.08	— .14
Witch Hazel	lb.	.06	— .06½

BEANS

Calabar	lb.	.39	— .42
St. Ignatius	lb.	.23	— .24
St. John's Bread	lb.	.30	— .32
Tonka, Angostura	lb.	1.00	— 1.10
Para	lb.	.65	— .68
Surinam	lb.	.69	— .74
Vanilla, Mexican, whole	lb.	4.45	— 5.90
Cuts	lb.	2.90	— 2.95
Bourbon	lb.	2.20	— 3.00
South American	lb.	2.90	— 3.10
Tahiti, White Label	lb.	1.55	— 1.60
Green Label	lb.	—	— 1.50

BERRIES

Cubeb, ordinary	lb.	1.15	— 1.20
*XX	lb.	1.20	— 1.25
Powdered	lb.	1.30	— 1.35
Fish	lb.	.30	— .35
Horse, Nettle, dry	lb.	.72	— .90
Juniper	lb.	.08	— .09
Laurel	lb.	.07½	— .08½
Poke	lb.	.11	— .12
Prickly Ash	lb.	.11	— 12
Saw Palmetto	lb.	.18½	— .19½
Sloe	lb.	.48	— .52
Sumac	lb.	.05	— .06

*Nominal.

FLOWERS

Arnica	lb.	.94	— .99
Powdered	lb.	1.10	— 1.15
Borage	lb.	.59	— .69
Calendula	lb.	3.50	— 4.00
Chamomile, German	lb.	—	— —
*Hungarian type	lb.	.48	— .55
Roman	lb.	.99	— 1.08
Spanish	lb.	.40	— .50
Clover Tops	lb.	.22	— .23
Dogwood	lb.	.15	— .16
Elder	lb.	.29	— .31
Insect, open	lb.	.29	— .33
Closed	lb.	.38	— .39
*Powd. Flowers and stems	lb.	.32	— .34
Powd. Flowers	lb.	.34	— .36
*Kousso	lb.	—	— —
Lavender, ordinary	lb.	.19	— .23
Select	lb.	.30	— .34
Linden, with leaves	lb.	.33	— .35
Without leaves	lb.	.47	— .49
Malva, blue	lb.	3.05	— 3.10
Black	lb.	.40	— .45
Mullein	lb.	1.75	— 1.85
Orange	lb.	1.95	— 2.00
Ox-Eye, Daisy	lb.	.05½	— .06
Poppy, red	lb.	.95	— .98
Rosemary	lb.	.68	— .69
Saffron, American	lb.	.39	— .42
Valencia	lb.	15.95	—16.40
Tilia (see Linden)			

GUMS

Aloes, Barbados	lb.	1.05	— 1.10
Cape	lb.	.18	— .20
Curacao, cases	lb.	.09	— .09½
Socotrine, whole	lb.	.73	— .80
Powdered	lb.	.78	— .85
Ammoniac, tears	lb.	1.42	— 1.47
Powdered	lb.	1.47	— 1.50
Arabic, firsts	lb.	.49	— .50
*Seconds	lb.	—	— —
Sorts Amber	lb.	.28	— .30
Powdered	lb.	.33	— .35
Asafoetida, whole, U.S.P.	lb.	1.80	— 2.00
Powdered, U.S.P.	lb.	2.00	— 2.25
Benzoin, Siam	lb.	1.35	— 1.50
Sumatra	lb.	.33	— .42
Catechu	lb.	.20	— .23
*Chicle, Mexican	lb.	1.00	— 1.15
Damar Batavia, No. 1	lb.	.29	— .30
Euphorbium	lb.	.22	— .25
Powdered	lb.	.27	— .30
Galbanum	lb.	1.35	— 1.45
Gamboge	lb.	1.85	— 2.05
Guaiac	lb.	1.25	— 1.30
Hemlock	lb.	.80	— .90
Kauri No. 1	lb.	.53	— .55
Kino	lb.	.49	— .59
Mastic	lb.	1.45	— 1.50
Myrrh, Select	lb.	.55	— .60
Sorts	lb.	.50	— .55
Siftings	lb.	.43	— .48
Olibanum, siftings	lb.	.13	— .14
Tears	lb.	.17	— .22
Sandarac	lb.	.75	— .80
*Senegal, picked	lb.	.34	— .39
Sorts	lb.	.28	— .30
Spruce	lb.	.65	— .75
Thus, per bbl.	280-lb.	13.00	— 13.50
*Tragacanth, Aleppo firsts	lb.	3.00	— 3.05
Seconds	lb.	2.50	— 3.20
*Thirds	lb.	2.75	— 2.95
*Turkey, firsts	lb.	—	— —
*Seconds	lb.	—	— —
*Thirds	lb.	—	— —

LEAVES AND HERBS

Aconite	lb.	.34	— .40
Balmony	lb.	.10	— .12
Bay, true	lb.	—	— —
Belladonna	lb.	1.25	— 1.45
Boneset, leaves and tops	lb.	.17	— .19
Buchu, short	lb.	—	— 1.45
Long	lb.	1.50	— 1.55
Cannabis, true, imported	lb.	3.45	— 3.55
American	lb.	.32	— .40
Catnip	lb.	.08	— .10
Chestnut	lb.	.05	— .06
Chiretta	lb.	.45	— .48
*Coca, Huanuco	lb.	—	— —
*Truxillo	lb.	—	— —
Coltsfoot	lb.	.19	— .21
*Conium	lb.	—	— —
Corn Silk	lb.	.10	— .10½
Damiana	lb.	.17	— .19
Deer Tongue	lb.	.23	— .24

*Nominal.

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Digitalis, Domestic	lb.	.44	— .48
Imported	lb.	.51	— .52
Eucalyptus	lb.	.08	— .09
Euphorbia Pilulifera	lb.	.18	— .19
Grindelia Robusta	lb.	.09½	— .11½
*Henbane, German	lb.	—	— —
Russian	lb.	1.40	— 1.90
Domestic	lb.	1.30	— 2.05
Henna	lb.	.30	— .31
Horehound	lb.	.22	— .23
Jaborandi	lb.	.28	— .30
Laurel	lb.	.12½	— .12¾
Life Everlasting	lb.	.09	— .10
Liverwort	lb.	.29	— .34
Lobelia	lb.	.08	— .10
Matico	lb.	.30	— .32
*Marjoram, German	lb.	—	— —
*French	lb.	—	— —
Motherwort herb	lb.	—	— .15
Patchouli	lb.	.74	— .81
Pennyroyal	lb.	.17	— .19
Peppermint, American	lb.	.29	— .32
Pichi	lb.	.09½	— .11½
*Prince's Pine	lb.	.32	— .34
Plantain	lb.	.13	— .14
*Pulsatilla	lb.	6.45	— 6.50
Queen of the Meadow	lb.	.08	— .09
Rose, red	lb.	1.23	— 1.29
Rosemary	lb.	.13	— .14
Rue	lb.	.45	— .50
*Sage, Austrian, stemless	lb.	—	— —
*Grinding	lb.	—	— —
Greek, stemless	lb.	.24½	— .24½
Spanish	lb.	.19½	— .19¾
Savory	lb.	.19	— .19½
Senna, Alexandria, whole	lb.	1.16	— 1.19
Half Leaf	lb.	.83	— .90
Siftings	lb.	.38	— .42
Powdered	lb.	.40	— .42
Tinnevelly	lb.	.14	— .19
Pods	lb.	.17	— .19
Skullcap, Western	lb.	.15½	— .17½
Spearmint American	lb.	.19	— .20
Squaw Vine	lb.	.27	— .30
Stramonium	lb.	.21	— .22
Tansy	lb.	.09	— .11
Thyme Spanish	lb.	.09½	— .09¾
French	lb.	.12¾	— .12¾
Uva Ursi	lb.	.21	— .24
Witch Hazel	lb.	.07½	— .08
Wormwood imported	lb.	.26	— .30
Yerba Santa	lb.	.07	— .07½

ROOTS

Aconite, U. S. P.	lb.	.30	— .50
Powdered	lb.	.45	— .50
German	lb.	—	— —
*Powdered	lb.	—	— —
Alkanet	lb.	2.20	— 2.25
Althea, cut	lb.	.75	— .80
Whole	lb.	.33	— .37
Angelica American	lb.	.48	— .55
*German	lb.	—	— —
Arnica	lb.	.80	— .95
Arrowroot, American	lb.	.17½	— .19½
Bermuda	lb.	.53	— .59
St. Vincent	lb.	.34	— .39
Bamboo Brier	lb.	.05	— .06
Bearsfoot	lb.	.08½	— .09
Belladonna	lb.	2.20	— 2.60
Powdered	lb.	2.30	— 2.70
Berberis, Aquifolium	lb.	.18	— .19
Beth	lb.	.09	— .10
Blood	lb.	.25	— .26
Blueflag	lb.	.31	— .33
Bryonia	lb.	.29	— .30
*Burdock, Imported	lb.	.19	— .20
American	lb.	.18	— .19
Calamus, bleached	lb.	—	— 1.50
Unbleached, natural	lb.	.24	— .26
Cohosh, black	lb.	.11	— .12
Blue	lb.	.10	— .10½
Colchicum	lb.	2.40	— 2.90
Colombo, whole	lb.	.19	— .20
Comfrey	lb.	.20	— .22
Culver's	lb.	.14	— .15
Cranesbill see Geranium.			
Dandelion, English	lb.	.29	— .30
American	lb.	.29	— .31
Doggrass Dom.	lb.	.42	— .45
Cut Bermuda	lb.	.30	— .32
chinacea	lb.	.29	— .30
Elecampane	lb.	.08	— .08½
Galangal	lb.	.25	— .26
Gelsemium	lb.	.08½	— .09
Gentian	lb.	.16	— .16½
Powdered	lb.	.19	— .22
Geranium	lb.	.06	— .07

*Nominal.

WHERE TO BUY

H. R. Lathrop & Co., Inc.
116 Beekman St. New York

BOTANICAL DRUGS

Ibero-American Export Co.,
INCORPORATED
10 Bridge Street, New York
OFFER
Licorice Root—African Caraway Seed
Sage Leaves—Rosemary Leaves

Ginger, Jamaica, unbleached	lb.	.17	— .19
Bleached	lb.	.25	— .26
Ginseng, Cultivated	lb.	—	— —
Wild, Eastern	lb.	—	— —
Northwestern	lb.	13.00	—15.00
Southern	lb.	8.00	—12.00
Golden Seal	lb.	5.40	— 5.60
Powdered	lb.	5.80	— 6.10
Hellebore, Black	lb.	.95	— 1.00
White, Domestic	lb.	.21½	— .22
Powdered	lb.	.25	— .28
*Imported	lb.	—	— —
Ipecac, Cartagena	lb.	3.25	— 3.30
Powdered	lb.	3.40	— 3.50
Rio	lb.	3.10	— 3.15
Jalap, whole	lb.	.55	— .60
Powdered	lb.	.65	— .70
Kava Kava	lb.	.17½	— .19
*Lady Slipper	lb.	.73	— .79
Licorice, Russian, cut	lb.	.74	— .75
Spanish natural bales	lb.	.29	— .31
Selected	lb.	.31	— .33
Powdered	lb.	.32	— .34
Lovage, American	lb.	.73	— .75
Manaca	lb.	.26	— .27
Mandrake	lb.	.08½	— .09
Musk, Russian	lb.	1.90	— 2.10
Orris, Florentine, bold	lb.	.25	— .26
Verona	lb.	.22	— .24
Finger	lb.	1.95	— 2.10
Pareira Brava	lb.	.32	— .33
Pellitory	lb.	.29	— .31
Pink, true	lb.	.42	— .43
Pleurisy	lb.	.18	— .19
Poke	lb.	.05	— .06
Rhatany	lb.	.13	— .15
Rhubarb Shensi	lb.	.80	— .85
Chips	lb.	.60	— .65
Cuts	lb.	.75	— 2.50
High Dried	lb.	.62	— .70
Sarsaparilla, Honduras	lb.	.74	— .78
American	lb.	.40	— .45
Mexican	lb.	.65	— .75
Senega, Northern	lb.	1.05	— 1.10
Southern	lb.	100	— 1.05
Serpentaria	lb.	.45	— .50
Skunk Cabbage	lb.	.17	— .20
*Snake, Black	lb.	.34	— .35
Canada natural	lb.	.34	— .38
Stripped	lb.	.45	— .50
Spikenard	lb.	.28	— .30
Squill, white	lb.	.13	— .14
Stillingia	lb.	.11½	— .12
Stone	lb.	.09	— .10
*Turmeric, Aleppy	lb.	.08	— .08½
China	lb.	.10	— .10½
Madras	lb.	.12	— .12½
Unicorn false (helonias)	lb.	.44	— .47
True (Aletris)	lb.	.45	— .49
Valerian, Belgian	lb.	1.30	— 1.35
*English	lb.	—	— —
*German	lb.	—	— —
Japanese	lb.	1.10	— 1.12
Yellow Dock	lb.	.11	— .14
Domestic	lb.	—	— —
Yellow Parilla	lb.	.09	— .11

SEEDS

*Anise, Levant	lb.	—	— —
Spanish	lb.	.25¾	— .26
Star		.26	— .26½
Canary, Spanish	lb.	15½	— .16
South American	lb.	.16	— .16½

*Nominal.

Caraway, African	lb.	.52	— .53
*Dutch	lb.	—	— —
Cardamoms, fair bleached	lb.	.80	— .85
Celery	lb.	.41½	— .42
Colchicum	lb.	3.70	— 3.80
Conium	lb.	.39	— .40
Coriander, Bombay	lb.	.11½	— .12
Morocco, Unbleached	lb.	—	— —
Mogador, Unbleached	lb.	.12	— .12½
Natural	lb.	.14½	— .15
Cumin, Levant	lb.	17½	— .19
Malta	lb.	18½	— .19½
Morocco	lb.	.12½	— .12¾
Dill	lb.	.19	— .19½
Fennel, French	lb.	16½	— .17½
*German, small	lb.	—	— —
*Roumanian, small	lb.	—	— —
Flax, whole	per bbl.	18.25	—18.75
Ground	lb.	.10½	— .11½
Foenugreek	lb.	.13	— .13½
Hemp, Manchurian	lb.	.06¼	— .06½
*Russian	lb.	—	— —
Job's Tears, white	lb.	.06½	— .06¾
Larkspur	lb.	.32½	— .33
Lobelia	lb.	.29½	— .30½
Mustard, Bari, Brown	lb.	—	— —
Dutch	lb.	—	— —
Bombay, Brown	lb.	.15¾	— .15½
California, brown	lb.	.19½	— .20
Chinese	lb.	.11½	— .12
English, yellow	lb.	.28	— .29
Parsley	lb.	.19½	— .20½
Poppy, Dutch	lb.	—	— —
Russian blue	lb.	.78	— .79
Indian	lb.	.40	— .41
Quince	lb.	1.14	— 1.24
Rape, English	lb.	—	— —
Japanese small	lb.	.09½	— .10
Domestic	lb.	.10	— .10¼
Sabadilla	lb.	.11	— .12
Stramonium	lb.	.44	— .49
*Strophanthus, Hispidus	lb.	1.45	— 1.50
Kombe	lb.	1.88	— 2.00
Sunflower, domestic	lb.	.07	— .07½
South American	lb.	.07	— .07¼
Thyme, Spanish	lb.	.09¼	— .09¾
French	lb.	.12½	— .12¾
Worm, American	lb.	.07	— .08
Levant	lb.	.83	— .88

SPICES

Capsicum, African	lb.	.21	— .22
Japan	lb.	.14½	— .15
Cassia, Batavia, No. 1	lb.	.30	— .31
China, Selected, bales	lb.	.17	— .17½
Saigon genuine	lb.	.57	— .58
Cassia Buds	lb.	.27	— .28
Chilies, Japan	lb.	.16	— .16¼
Mombasa	lb.	.28½	— .29
Cilnnamon, Ceylon	lb.	.29	— .31
Cloves, Amboynas	lb.	.61	— .62
Zanzibar	lb.	.46½	— .47
Ginger African	lb.	.13	— .13½
Cochin "D"	lb.	.19	— .20
Jamaica, white good	lb.	.17¼	— .18
Japan	lb.	.12	— .12½
Mace, Banda, No. 1	lb.	.56	— .57
Batavia, No. 2	lb.	.46	— .47
Nutmegs, 110s	lb.	.38	— .39
Pepper, black, Sing	lb.	.27	— .27½
White	lb.	.33¼	— .33½
Pimento	lb.	.07¼	— .07½

WAXES

Bayberry	lb.	.35	— .36
Bees, Yellow, crude	lb.	.42	— .43
Yellow, refined	lb.	.44	— .45
White	lb.	.63	— .64
Candelilla	lb.	.54	— .55
Carnauba, Flor.	lb.	.95	— .96
No. 1	lb.	.93	— .94
No. 2	lb.	.87	— .89
No. 3	lb.	.74	— .75
Ceresin, Yellow	lb.	.16	— .17
White	lb.	.18	— .20
Japan	lb.	.23	— .24
Montan, crude	lb.	.34	— .36
Bleached	lb.	.55	— .56
Ozokerite, crude, brown	lb.	.34	— .35
*Green	lb.	—	— —
*Refined, white	lb.	—	— —
*Domestic	lb.	—	— —
Refined, yellow	lb.	—	— —
Paraffin, ref'd 120 deg. m.p.	lb.	.13	— .13½
Foreign, 130 deg. m.p.	lb.	.15	— .16
Stearic Acid—			
Single pressed	lb.	.22	— .23½
Double pressed	lb.	.23½	— .24
Triple pressed	lb.	.25½	— .26

*Nominal.

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Heavy Chemicals

Acetic acid, 28 p.c.	lb.	.17 —	.17¾
56 p.c.	lb.	.28¼—	.29
70 p.c.	lb.	.45 —	.46
*80 p.c.	lb.	.42½—	.43¼
*Glacial Gov. pr.	lb.	.19½	Gov. pr.
Alum, ammonia, lump	lb.	.05 —	.05½
Ground	lb.	.05⅛—	.05¼
Powdered	lb.	.05½—	.05¾
Chrome	lb.	.20¼—	.21½
Potash lump	lb.	.09¾—	.09¾
Ground	lb.	.09 —	.09¾
Alum, Potash, Powdered	**lb.**	**.08¼—**	**.05½**
Soda, Ground	**100 lbs.**	**— —**	**6.38**
Aluminum chloride, liq.	**lb.**	**.04¼—**	**.05**
Sulph., high grade	lb.	.03½—	.04
Low grade	lb.	.02½—	.03
Aluminum hydrate light	lb.	.17 —	.18½
Heavy	lb.	.11 —	.12½
Arsenic, white	lb.	.09¼—	.17
Red	lb.	.65 —	.70
Ammonia, Anhydrous	lb.	.38 —	.43
Ammonia Water, 26 deg.,car.	lb	— —	.08½
*20 deg., carboys	lb.	— —	—
*18 deg., carboys	lb.	— —	—
*16 deg., carboys	lb.	— —	—
Ammonium chloride, U.S.P.	**lb.**	**.19 —**	**.21**
*Sal Ammoniac, gray	lb.	.22½—	.23½
Granulated, white	lb.	.22¾—	.23
Lump	lb.	1.00 —	1.10
Sulphate, foreign	**100 lbs.**	**— —**	**—**
Domestic	100 lbs.	8.00 —	8.50
Antimony Salts, 75 p.c.	**lb.**	**— —**	**—**
65 p. c.	**lb.**	**— —**	**—**
47 p. c.	**lb.**	**— —**	**—**
Blanc Fixe, dry	**lb.**	**.04½—**	**.04¾**
Barium, chloride	ton	85.00	—95.00
Dioxide	**lb.**	**.28 —**	**.30**
Nitrate	lb.	.11¾—	.12¾
Barytes, floated, white	ton	31.00	—38.00
Off color	**ton**	**14.00**	**—18.00**
Bleaching Powder, 35 p.c.	lb.	.02½—	.04¼
*Calcium Acetate,	100 lbs.	—	4.00
Carbide	**ton**	**70.00**	**—73.00**
Carbonate	**lb.**	**— —**	**—**
Chloride, solid, f.o.b. N.Y.	**ton**	**24.00**	**—26.00**
Granulated, f.o.b. N. Y.	**ton**	**— —**	**—**
Solid, second hands	**ton**	**30.00**	**—34.00**
Gran. second hands	**ton**	**40.00**	**—45.00**
Sulphate, 98-99 p.c.	**lb.**	**.09 —**	**.09¼**
Carbon tetrachloride	lb.	.15½—	.20
Copper Carbonate	**lb.**	**.33 —**	**.35**
Subacetate (Verdigris)	**lb.**	**.40 —**	**.42**
Powdered	**lb.**	**.40 —**	**.42**
Sulphate, 98-99 p.c.	lb.	.09½—	.09¾
Second hands	lb.	.08¾—	.09
Powdered	**lb.**	**.10¼—**	**.11¼**
Copperas, f.o.b. works	100 lbs.	1.90 —	2.20
Fusel Oil, crude	**gal.**	**2.65 —**	**2.75**
Refined	**gal.**	**3.75 —**	**4.00**
Hydrofluoric Ac. 30 p.c. bbls.	lb.	— —	.05
48 p. c. in carboys	**lb.**	**— —**	**.09**
52 p. c. in carboys	**lb.**	**— —**	**.10**
Lead, Acetate, brown sugar	**lb.**	**.15¾—**	**.16¼**
Broken Cakes	**lb.**	**.16 —**	**.16½**
Granulated	lb.	.17¼—	.18⅛
Arsenate, powdered	lb.	.31 —	.35
Paste	lb.	.15 —	.17½
*Nitrate	lb.	**Nominal**	
Oxide, Litharge, Amer. pd.	**lb.**	**.09½—**	**.09¾**
Foreign	lb.	— —	—
Red, American	**lb.**	**— —**	**.10¼**
Sulphate, basic	lb.	— —	.08¼
White, Basic Carb., Amer. dry	lb.	— —	.09¼
in Oil. 100 lbs. or over	**lb.**	**— —**	**.10¼**
English	lb.	— —	—
Lime, hydrate	lb.	Nominal	
Sulphur solution	gal.	.15 —	.19½
Magnesite, f.o.b. Cal.	**lb.**	**42.00**	**—44.00**
f. o. b. N. Y	**lb.**	**65.00**	**—70.00**
Muriatic acid,			
*18 deg. carboys	lb.	.02½—	.02¼
20 deg. carboys	lb.	.02½—	.02¼
22 deg. carboys	lb.	.02½—	.03½
Nickel oxide	lb.	.60 —	.70
Salts, single	lb.	.14 —	.15
double	lb.	.12 —	.13
Nitric acid, 36 deg. carboys	lb.	.06½—	.06¾
*38 deg. carboys	lb.	.07¼—	.08
40 deg. carboys	lb.	.07¾—	.08
42 deg. carboys	lb.	.08½	Gov. pr.
Aqua Fortis, 36 deg. carb.	**lb.**	**— —**	**.05½**
38 deg. carboys	**lb.**	**— —**	**.05¾**
40 deg. carboys	**lb.**	**— —**	**.06**
42 deg. carboys	**lb.**	**— —**	**.06¼**

*Nominal.

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For Prompt Delivery:

Calcined Carbonate of Potash!

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Phosphorus, red	lb.	1.15 —	1.20
Yellow	lb.	1.35 —	1.40
Plaster of Paris	**bbl.**	**1.50 —**	**1.76**
True Dental	**bbl.**	**1.75 —**	**2.00**
Potash Caustic, 88-82	lb.	.74¾—	76¾
Potassium Bichromate	lb.	.45 —	.45¾
Carbonate, calc	**lb.**	**.68 —**	**.75**
Chlorate, cryst	lb.	.40 —	.41
Powdered	lb.	.37½—	.38
Muriate, basis 80p.c. per ton		**350.00 —**	**370.00**
Prussiate, red	lb.	2.60 —	2.70
Yellow	lb.	1.15 —	1.20
Saltpetre, Granulated	**lb.**	**.27½—**	**.27½**
Refined	**lb.**	**.31¼—**	**.31½**
Soda Ash, 58 p.c. in bags 100 lbs.		2.30 —	2.50
In bbls.	100 lbs.	3.00 —	3.15
Caustic 76 p.c. Solid 100 lbs.		4.20 —	4.40
Powd. or gran., 76 p.c.	**100 lbs.**	**5.75 —**	**6.10**
Sodium Bichromate	lb.	.25¾—	.27½
Bisulphate	**lb.**	**— —**	**—**
Carbonate, Sal. Soda, Am.	100 lb.	1.35 —	1.45
Chlorate	lb.	.24 —	.25
Cyanide	lb.	.38¼—	.40
Hyposulphite, bbls.	100 lbs.	2.75 —	3.00
Kegs	100 lbs.	2.40 —	2.60
*Nitrate, tech.	lb.	— —	4.10
Refined	**lb.**	**.06¼—**	**.07**
Nitrite	lb.	.28 —	.30
Prussiate, Yellow	lb.	.56 —	.58
Silicate, 60 p.c.	100 lbs.	6.25 —	6.50
40 p.c.	100 lbs.	2.40 —	2.60

*Nominal.

Sod. Sulph., Gl'b. salt	100 lbs.	2.25 —	3.00
Sulphide 60-62 p.c. cryst.	lb.	.07¾—	.08
40 p.c.	100 lbs.	2.25 —	2.60
*Sulphur (crude) f.o.b. N.Y.	ton	— —	—
*f. o. b. Baltimore	ton	— —	—
Sulphuric Acid			
60 deg. f.o.b. wks.	ton	18.00	Gov. pr.
66 deg. f.o.b. wks.	ton	28.00	Gov. pr.
Oleum, f.o.b. wks.	ton	32.00	Gov. pr.
Battery Acid car's per 100 lbs.		Nominal	
Tin, bichloride	lb.	Nominal	
Zinc, carbonate	lb.	.22 —	.24
Chloride	lb.	.15½—	.16
Oxide	lb.	.14¾—	.18
Sulphate	lb.	.05 —	.05⅛

Dyestuffs, Tanning Materials and Accessories

COAL-TAR CRUDES

Benzol, C. P.	gal.	.24 —	.25
(90 p.c.)	gal.	.28½—	.30½
Cresylic acid, crude, 95-97p.c.	gal.	1.15 —	1.25
50 p.c.	lb.	.75 —	.85
25 p.c.	lb.	.40 —	.45
Cresol, U. S. P.	lb.	.19½—	.22
Creosote oil, 25 p.c.	gal.	.38 —	.45
Dip. oil, 20 p.c.	gal.	.40 —	.50
Naphthalene, balls	lb.	.10 —	.10¼
Flake	lb.	.09 —	.09¼
Phenol	lb.	.43¾—	.44½
Pitch, various grades	**ton**	**10.00 —**	**20.00**
Solvent naphtha, waterwhite	gal.	.19½—	.23½
Crude heavy	gal.	.14 —	.17
*Toluol, pure	gal.	1.50 —	1.55
*Commercial, 90 p.c.	gal.	1.50 —	1.55
Xylol, pure water white	gal.	.45 —	.55

INTERMEDIATES

Acid Benzoic	lb.	3.00 —	3.25
***Acid Benzoic Crude**	**lb.**	**Nominal**	
Acid H	lb.	3.25 —	3.35
Acid Metanilic		**— —**	**—**
Acid Naphthionic, Crude	lb.	1.05 —	1.15
Refined	lb.	1.20 —	1.30
Acid Sulphanilic, crude	lb.	.31 —	.33
Refined	lb.	.42 —	.44
p-Amidophenol Base	lb.	3.80 —	4.00
p-Amidophenol Hydrochloride	lb.	4.15 —	4.30
*Aminoazobenzene	lb.	— —	—
Aniline Oil, drums extra	lb.	.27½—	.28½
Aniline Salts	lb.	.43 —	.45
Aniline for red	**lb.**	**1.15 —**	**1.20**
*Anthracene (80 p.c.)	lb.	.85 —	.90
Anthraquinone	lb.	3.75 —	5.10
Benzaldehyde	lb.	3.75 —	4.25
Benzidine Base	lb.	1.75 —	1.85
Benzidine Sulphate	lb.	1.40 —	1.50
Benzoate of Soda	lb.	2.90 —	3.00
Benzylchloride	lb.	2.60 —	2.70
Dimmedophenol	lb.	7.50 —	8.00
o-Dianisidine	lb.	— —	—
Dichlorbenzol	lb.	.35 —	.40
o-Dichlorbenzol	lb.	.15 —	.16
p Dichlorbenzol	lb.	.13 —	.14
Diethylaniline	lb.	4.25 —	4.50
Dimethylaniline	lb.	.76 —	.80
Dinitrobenzol	lb.	.34¼—	.36
m-Dinitrobenzene	lb.	.45 —	.50
Dinitrochlorbenzene	lb.	.50 —	.56
Dinitrochlorbenzol	lb.	.40⅛—	.40½
Dinitronaphthalene	lb.	.44 —	.75
Dinitrophenol	lb.	.55 —	.58
*Dinitrotoluol	lb.	.60 —	.62
Diphenylamine	lb.	1.05 —	1.15
Dioxynaphthalene	lb.	— —	—
"G" Salt	lb.	.85 —	1.00
Hydrazobenzene	**lb.**	**1.50 —**	**2.00**
Induline	lb.	2.00 —	2.75
Methylanthraquinone	**lb.**	**— —**	**—**
Monodinitrochlorbenzol	**lb.**	**.48 —**	**.52**
Monoethylaniline	**lb.**	**1.00 —**	**1.25**
Naphthalenediamine	**lb.**	**— —**	**—**
a-Naphthol	lb.	1.60 —	1.65
b-Naphthol, Technical	lb.	.65 —	.70
Sublimed	lb.	.80 —	.85
a-Naphthylamine	lb.	.60⅛—	.61
b-Naphthylamine	lb.	1.65 —	1.75
p-Nitranilin	lb.	1.70 —	1.80
Nitrobenzene	**lb.**	**.20 —**	**.22**
o-Nitrochlorbenzol	**lb.**	**.50 —**	**.56**
Nitronaphthalene	**lb.**	**.44 —**	**.65**
p-Nitrophenol	lb.	1.65 —	1.85
p-Nitrotoluol	lb.	1.55 —	1.70

*Nominal

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Nitrotoluol	lb.	.55	— .65
o-Nitrotoluol	lb.	.75	— .80
m-Phenylenediamine	lb.	3.00	— 3.40
p-Phenylenediamine	lb.	3.75	— 4.00
Phthalic Anhydride	lb.	3.75	— 4.50
Pseudo-Cumol	lb.	—	— —
Resorcin, crystals, U. S. P.	lb.	8.00	— 8.50
Resorcin, Technical	lb.	5.75	— 7.25
Tetranitromethylaniline	lb.	—	— 2.50
Tolidin	lb.	2.60	— 3.00
o-Toluidine	lb.	1.00	— 1.10
p-Toluidine	lb.	2.05	— 2.25
m-Toluylenediamine	lb.	1.70	— 1.75
Xylene, pure	gal.	1.00	— 1.25
Xylene, Com.	gal.	.35	— .40

COAL-TAR COLORS

Acid Black	lb.	1.50	— 2.00
Acid Blue	lb.	3.50	— 5.50
Acid Brown	lb.	2.00	— 2.75
Acid Fuchsin	lb.	6.25	— 7.50
Acid Orange	lb.	.40	— .60
Acid Orange II	lb.	.60	— .75
Acid Orange III	lb.	1.00	— 1.25
Acid Red	lb.	1.50	— 1.80
Acid Scarlet	lb.	.90	— 1.20
Acid Violet 10 B	lb.	7.25	— 8.75
Alpine Yellow	lb.	4.25	— 4.75
Alizarin Blue, bright	lb.	7.75	— 9.25
Alizarin Blue, medium	lb.	6.00	— 7.50
*Alizarin Brown, conc.	lb.	7.50	— 8.50
Alizarin Orange	lb.	6.30	— 8.00
Alizarin Red, W. S. Paste	lb.	9.50	—10.50
Alkali Blue, Domestic	lb.	9.00	—12.00
Alkali Blue, Imported	lb.	14.00	—15.00
Alpine Red	lb.	6.75	— 8.25
Azo Carmine	lb.	5.50	— 6.50
Azo Yellow	lb.	1.70	— 3.50
Azo Yellow, green shade	lb.	3.50	— 4.50
Auramine, Single O, Dom.	lb.	4.50	— 4.95
Auramine, Double O, Imp.	lb.	6.00	— 6.50
Benzo Purperine 10 B	lb.	6.50	— 6.75
Benzo Purperine 4 B	lb.	3.75	— 4.25
Bismarck Brown Y	lb.	.80	— .90
Bismarck Brown R	lb.	.95	— 1.10
Chrome Black, Dom.	lb.	1.65	— 2.00
Chrome Black, Imp.	lb.	3.30	— 4.00
Chrome Blue	lb.	2.00	— 2.50
Chrome Green, Dom.	lb.	2.50	— 2.75
Chrome Red	lb.	2.25	— 2.75
Chrysoidine R	lb.	1.30	— 1.50
Chrysoidine Y	lb.	1.15	— 1.25
Chrysophine, Domestic	lb.	6.50	— 8.00
Chrysophine, Imported	lb.	11.00	—12.50
Congo Red	lb.	2.85	— 2.50
Crystal Violet	lb.	6.50	— 7.50
Diamine Sky Blue F. F.	lb.	9.25	—13.00
Direct Black	lb.	1.25	— 1.50
Direct Blue	lb.	2.00	— 2.75
Direct Sky Blue	lb.	2.50	— 6.00
Direct Brown	lb.	2.00	— 2.50
Direct Bordeaux	lb.	2.85	— 3.45
Direct Fast Red	lb.	5.00	— 6.00
Direct Yellow	lb.	2.50	— 2.75
Direct Fast Yellow	lb.	2.90	— 3.85
Direct Violet	lb.	2.50	— 3.50
Emerald Green Crystals	lb.	18.50	—20.00
Erythrosine	lb.	11.00	—13.00
Fast Light Yellow, 2-G.	lb.	3.25	— 4.00
Fast Red, 6B extra, con't	lb.	4.60	— 5.00
Fur Black, extra	lb.	2.40	— 3.10
Fur Brown B	lb.	2.00	— 3.10
Fuchsine Crystals, Dom.	lb.	8.50	—10.50
Fuchsine Crystals, Imp.	lb.	12.00	—12.50
Geranine	lb.	8.75	— 9.25
*Green Crystals, Brilliant	lb.	12.00	—13.00
Indigo 20 p.c. paste	lb.	1.75	— 2.00
Indigotine, conc.	lb.	4.25	— 5.00
Indigotine, paste	lb.	1.50	— 2.50
Induline	lb.	1.15	— 1.70
Magenta Acid, Domestic	lb.	4.25	— 5.00
Magenta Crystals, Imported	lb.	11.00	—12.00
Malachite Green, Crystals	lb.	7.50	— 9.50
Malachite Green, Powdered	lb.	4.75	— 5.75
Metanil Yellow	lb.	1.75	— 2.75
Medium Green	lb.	5.00	— 6.00
Methylene Blue, tech.	lb.	3.10	— 3.50
Methyl Violet	lb.	3.25	— 3.50
Naphthol Green	lb.	2.50	— 2.75
Nigrosine, Oil Sol.	lb.	.85	— 1.00
Nigrosine, spts. sol.	lb.	.75	— 1.25
Nigrosine water sol., blue	lb.	.75	— 1.05
Jet	lb.	.80	— 1.00
*Naphthylamine Red	lb.	6.75	— 7.50
Oil Black	lb.	.85	— 1.20
Oil Orange	lb.	2.00	— 2.50
Oil Scarlet	lb.	2.00	— 2.50
Oil Yellow	lb.	1.80	— 2.50
Orange, R. G., contract	lb.	2.00	— 2.25
Orange Y, conc.	lb.	1.00	— 1.25

*Nominal.

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Aniline Dyestuffs
Dyewood Extracts
Industrial Oils
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Oxamine Violet	lb.	6.50	— 7.00
Patent Blue, Swiss Type	lb.	20.00	— 23.00
Phosphine G. Domestic	lb.	3.50	— 4.00
Ponceau	lb.	1.80	— 2.50
Prinuline, Dom.	lb.	5.00	— 6.00
Rhodamine B, ex. cont.	lb.	80.00	—85.00
Scarlet 2R	lb.	3.25	— 4.50
Sulphur Blue, Dom.	lb.	2.25	— 2.75
Soluble Blue, Imp.	lb.	12.00	—13.00
Sulphur Black	lb.	.40	— .65
Sulphur Black E.S. standard	lb.	.90	— 1.00
Sulphur Black 100 p.c.	lb.	1.10	— 1.75
Sulphur Black, 150 p.c.	lb.	1.50	— 2.15
Sulphur Blue-Black	lb.	3.10	— 3.65
Sulphur Brown	lb.	.12	— .50
Sulphur Green	lb.	1.75	— 2.50
Sulphur, Navy Blue	lb.	1.40	— 1.75
Sulphur Yellow	lb.	1.10	— 1.55
Tartrazine, Domestic	lb.	1.70	— 1.80
Tartrazine, Imported	lb.	1.25	— 1.40
Uranine, Domestic	lb.	10.00	—11.00
Wool Green S. Swiss	lb.	8.00	— 8.50
Valonia, solid, 65 p.c. tan	lb.	5.00	— 6.00
Victoria Blue, base, Dom.	lb.	9.50	—11.00
Victoria Green	lb.	5.00	— 8.00
Victoria Red	lb.	8.25	— 9.00
Victoria Yellow	lb.	6.50	— 8.00
Yellow for wool	lb.	1.50	— 2.25

NATURAL DYESTUFFS

Annatto, fine	lb.	.31¾	— .33¾
Seed	lb.	.10¼	— .10¾
Carmine No. 40	lb.	4.25	— 4.75
Cochineal	lb.	.78	— 1.00
Gambier, see tanning.			
Indigo, Bengal	lb.	3.00	— 3.50
Oudes	lb.	2.25	— 2.75
Guatemala	lb.	2.25	— 2.75
Kurpahs	lb.	2.25	— 2.75
Madras	lb.	.90	— 1.00
Madder, Dutch	lb.	.26¼	— .29¾
Nutgalls, blue Aleppo	lb.	—	— —
Chinese	lb.	.33½	— .34⅛
Persian Berries	lb.	—	— —
Quercitron Bark, see tanning.			
Sumac, see tanning.			
China	lb.	.09	— .10¼
Turmeric, Madras	lb.	.11¼	— .12¼
*Aleppey	lb.	—	— —
Pubna	lb.	.10¼	— .11⅛

DYEWOODS

Barwood	lb.	—	— —
Camwood, chips	lb.	.17	— .20
Fustic, sticks	ton	43.00	—55.00
Chips	lb.	.03½	— .05¼
Hypernic, chips	lb.	.09	— .10
Logwood Sticks	ton	50.00	—55.00
Chips	lb.	.03½	— .05½
Quercitron, see tanning.			
Red Saunders, chips	lb.	.15	— .17

EXTRACTS

Archil, Double	lb.	.15¾	— .17¾
Triple	lb.	.18	— .20
Concentrated	lb.	.22	— .29
Cutch, Mangrove, see tanning.			
Rangoon, boxes	lb.	.23¾	— .25¾
Liquid	lb.	.14	— .14¼
Tablet	lb.	.13¼	— .14
Cudbear, French	lb.	—	— —
*English	lb.	—	— —
*Concentrated	lb.	—	— —
Flavine	lb.	1.00	— 1.50
Fustic, Solid	lb.	.28	— .29
Liquid, 51 deg.	lb.	.13¾	— .14¾
Gall	lb.	.29	— .30
Hematine Extract	lb.	.13	— .14
Crystals	lb.	.21	— .23
Hypernic, liquid	lb.	.30	— .32
Indigo, natural for cotton	lb.	.50	— .54
For wool	lb.	.30	— .32
Indigotine, 100 p.c. pure	lb.	—	— 5.50
Logwood, solid	lb.	.21	— .22
Crystals	lb.	.21	— .26
51 deg., Twaddle	lb.	.12¼	— .13¼
Contract	lb.	.10¼	— .10¾
Osage Orange—			
Powdered	lb.	—	— .25
Paste	lb.	.06	— .12

*Nominal.

Persian Berries	lb.	—	— —
Quebracho, see tanning.			
Quercitron, 51 deg., lia.	lb.	.07	— .07¼
Sumac, see tanning.			

MISCELLANEOUS DYESTUFFS

Albumen, Egg	lb.	1.25	— 1.30
Blood, imported	lb.	.90	— .95
Domestic	lb.	65	— .70
Prussian Blue	lb.	.80	— .90
Soluble	lb.	.95	— 1.00
Turkey Red Oil	lb.	.13	— .18
Zinc Dust, prime heavy	lb.	.13¼	— .15½

RAW TANNING MATERIALS

Algarobilla	ton	140.00	150.00
Divi Divi	ton	80.00	—85.00
Hemlock Bark	ton	15.00	—16.00
Mangrove, African, 38 p.c.	ton	60.00	—62.00
Bark, S. A.	ton	45.00	—50.00
*Myrobalans	ton	63.50	—65.00
Oak Bark	ton	15.00	—16.00
Ground	ton	—	—17.50
Quercitron Bark rough	ton	12.50	—14.00
Ground	ton	26.50	—27.50
Sumac, Sicily, 27 p.c. tan	ton	97.00	—100.00
Virginia, 25 p.c. tan	ton	59.50	— 64.50
Valonia Cups	ton	—	— —
Beard	ton	—	— —
Wattle Bark	ton	62.00	—64.00

TANNING EXTRACTS

Chestnut, ordinary, 25 p.c. tan, bbls.	lb.	.02¾	— .03
Clarified, 25 p.c. tan, bbls.	lb.	.03	— .03¼
Crystals, ordinary	lb.	—	— —
Clarified	lb.	—	— —
Gambier, 25 p. c. tan	lb.	.16½	— .17
Common	lb.	.24¼	— .25⅞
Cubes, Singapore	lb.	.34½	— .35¾
Cubes, Java	lb.	.19	— .20
Hemlock, 25 p.c. tan	lb.	.03½	— .04¼
Larch, 25 p.c. tan	lb.	.03	— .03¾
Crystals, 50 p.c. tan	lb.	.06	— .07
Mangrove, 55 p.c. tan	lb.	.08	— .12
Liquid, 25 p.c. tan	lb.	.06	— .08
Muskegon, 23-30 p.c. tan, 50 p.c. total solids	lb.	.01¼	— .02¼
Myrobalans, liq., 23-25 p.c.tan	lb.	Nominal	
Solid, 50 p.c. tan	lb.	.11	— .12
Oak Bark, liquid, 23-25p.c.tan	lb.	.03¼	— .04¼
Quebracho, liquid, 35 p.c.	lb.	.06¼	— .07
35 p.c. tan, untreated	lb.	—	— —
35 p.c. tan, bleaching	lb.	.07	— .07½
Solid, 65 p.c. tan, ordinary	lb.	.13¾	— .16
Clarified	lb.	.10	— .12
Spruce, liquid, 20 p.c. tan, 50 p.c. total solids	lb.	.01	— .01¼
Sumac, liquid, 25 p.c. tan	lb.	.07	— .10½
Valonia, solid, 65 p.c. tan	lb.	Nominal	

Oils

ANIMAL AND FISH
(Carloads)

Cod Newfoundland	gal.	1.32	— 1.35
Domestic, prime	gal.	1.28	— 1.30
Liver, Newfoundland	bbl.	90.00	—92.00
Norwegien	bbl.	140.00	—150.00
Degras, American	lb.	.24	— .25
*English	lb.	—	— —
German	lb.	—	— —
Neutral	lb.	.26	— .29
Horse	lb.	.17	— .18
No. 2	gal.	1.37	— 1.49
Lard, prime winter	gal.	—	— 2.25
Off prime	gal.	1.69	— 1.74
Extra, No. 1	gal.	1.55	— 1.56
No. 1	gal.	1.43	— 1.45
No. 2	gal.	1.41	— 1.43
Menhaden, Light strained	gal.	1.28	— 1.30
Yellow, bleached	gal.	1.33	— 1.35
White, bleached, winter	gal.	1.35	— 1.37
Northern, crude	gal.	1.12	— 1.13
*Southern, crude, f.o.b. plant	gal.	1.12	— 1.13
Neatsfoot, 20 deg.	gal.	3.44	— 3.46
30 deg., cold test	gal.	2.99	— 3.01
40 deg., cold test	gal.	2.94	— 2.96
Dark	gal.	1.49	— 1.55
Prime	gal.	1.95	— 2.00
Oleo Oil	lb.	22	— .24
*Porpoise, body	gal.	—	— —
*Jaw	gal.	—	—20.00
Red (Crude Oleic Acid)	lb.	.16	— .16½
Saponified	lb.	.16¼	— .17¼
*Sod Oil	lb.	—	— —

*Nominal.

Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

*Sperm bleached winter			
38 deg., cold test	gal.	—	— 2.22
45 deg., cold test	gal.	—	— 2.17
Natural winter, 38 deg., cold test	gal.	2.20	— 2.22
Stearic, single pressed	lb.	.21	— .22
Double pressed	lb.	.22	— .23
*Triple pressed	lb.	.25	— .26
Tallow, acidless	gal.	1.57	— 1.59
*Prime	gal.	1.52	— 1.55
Whale, natural winter	gal.	—	— 1.50
Bleached, winter	gal.	1.52	— 1.54

VEGETABLE OILS

Almond, sweet	lb.	1.60	— 1.75
*Castor, No. 1 bbls.	lb.	.29	— .30
Cases	lb.	.30	— .31
*No. 3	lb.	.28½	— .29
Cocoanut, Ceylon, bbls.	lb.	.17½	— .18½
*Ceylon, tanks	lb.	.16¾	— .16¾
Cochin, bbls.	lb.	.18¾	— .19
Tanks	lb.	.16¾	— .17½
Corn, refined, bbls.		21.47	—21.67
*Crude, bbls.	lb.	.17¾	— .18
*Cottonseed, Crude, f. o. b. mills, in tanks	lb.	—	— .17½
*Summer, yellow, prime	lb.	.21	— .21½
*White	lb.	—	— —
*Winter yellow	lb.	—	— —
Linseed, raw car lots	gal.	1.85	— 1.88
5 barrel lots	gal.	1.88	— 1.90
Boiled, 5-bbl. lots	gal.	1.90	— 1.92
Double Boiled, 5-bbl. lots	gal.	1.88	— 1.94
*Olive, denatured	gal.	4.25	— 4.50
*Foots	lb.	.42	— .44½
Palm, Lagos casks	lb.	—	— —
Benin	lb.	—	— —
Niger	lb.	—	— —
*Palm Kernel, domestic	lb.	.18	— .18¾
*Imported	lb.	—	— —
Peach Kernel	lb.	.40	— .42½
Peanut Oil, edible	lb.	.20	— .21
†Crude f. o. b. mills	gal.	1.36½	— 1.38
Pine Oil, white steam	gal.	—	— —
Yellow, steam	gal.	—	— —
*Poppy Seed	gal.	—	— —
Rapeseed, ref'd, bbls.	gal.	1.70	— 1.80
*Blown	gal.	1.75	— 1.80
*Rosin oil, first rect.	gal.	—	— —
Second	gal.	.42	— .45
*Sesame, domestic	gal.	—	— —
*Imported	gal.	—	— —
Soya Bean, Manchurian	lb.	.18⅛	— .18¾
*Tar Oil, gen. dist.	lb.	—	— —
Commercial	lb.	—	— —

MINERAL

Black, reduced, 29 gravity			
25-30 cold test	gal.	.23	— .24
29 gravity, 15 cold test	gal.	.23	— .24
Summer	gal.	.22½	— .24
*Cylinder, light, filtered	gal.	.40	— .42
Dark, filtered	gal.	.38½	— .42
Extra cold test	gal.	.65	— .70
Dark steam, refined	gal.	.27	— .31
Neutral, white, 29 grav.	gal.	—	— .50
Neutral, filtered lemon 33@34 gravity	gal.	—	— .35
White 30@31 gravity	gal	.85	— .90
Paraffin, high viscosity	gal.	.40	— .41
903 sp. gr.	gal.	.36	— .38
Red Paraffin	gal.	.32	— .38
Spindle, filtered	gal.	.40	— .47
No. 200	gal.	.36½	— .39¾
No. 100	gal.	.35	— .36
No. 110	gal.	.33	— .34

*Nominal.

WHERE TO BUY

Chas. Morningstar & Co., Inc.
WOOLWORTH BLDG. - BARCLAY-6005-6
STARCHES
DEXTRINES
ALBUMEN
GLUCOSE

Miscellaneous

NAVAL STORES
(Carloads ex-dock)

*Spirits Turpentine in bbls.	gal.	.60	— .61
*Wood Turpentine, steam distilled, bbls.	lb.	.55	— .57
*Turpentine, Destructive distilled, bbls.	lb.	.50	— .54
*Pitch, prime	200-lb bbl.	6.25	— 6.30
*Rosin, com., to g'd	80 bbl.	10.85	—10.90
*Tar, kiln-burnt, pure	50-gal. bbls.	13.25	—13.30

SHELLAC

D. C.	lb.	.83	— .84
Diamond "I"	lb.	—	— —
V. S. O.	lb.	.81	— .82
Fine Orange	lb.	.72	— .73
Second Orange	lb.	.69	— .70
T. N.	lb.	.66	— .67
A. C. Garnet	lb.	.66	— .67
Button	lb.	.77	— .78
Regular, bleached	lb.	.65	— .66
Bone, dry	lb.	.75	— .76

OIL CAKE AND MEAL

Cottonseed Cake, f.o.b. Texas		—	—53.50
f. o. b. New Orleans		—	— —
Cottonseed, Meal, f.o.b. Atlanta		—	—47.50
Columbia		—	—48.50
New Orleans	ton	47.00	—49.00
Corn Cake	short ton	37.00	—40.00
Meal	short ton	41.00	—42.00
Linseed cake, dom.	short ton	50.00	— —
Linseed Meal	short ton	50.00	— —

COCOA

Bahia	lb.	.12	— .12½
Caracas	lb.	.12	— .13
Hayti	lb.	.10¼	— .10½
Maracaibo	lb.	.22	— .23
Trinidad	lb.	.12	— .12½

DEXTRINES AND STARCHES

*British Gum, Globe, per 100lbs.		—	— —
Dextrine, Corn, white or yellow	lb.	.07½	— .08½
Potato, white or canary	lb.	.19½	— .20½
Starch Corn	lb.	.06	— .06
Pearl, Globe	lb.	.06	— .06½
Potato, Domestic	lb.	.13½	— .14
Imported, duty paid	lb.	.13½	— .14

§REFINED SUGAR
(Prices in Barrels)

	Ar- Amer.	Fed. Nat.	War bu'le	eral	ne
Powdered	7.65	7.65	7.65	7.65	7.65
XXXX	7.70	7.70	7.70	7.70	7.70
Confectioners A	7.40	7.40	7.40	—	7.40
Standard Gran.	7.55	7.55	7.55	7.55	7.55

*Nominal.
§Prices fixed by Government.

Soap Makers' Materials

ANIMAL AND FISH OILS
(Carlots)

Menhaden, crude, f.o.b. mills	ga.	.99	— 1.00
Light, strained	gal.	1.28	— 1.30
Yellow, bleached	gal.	1.33	— 1.35
White, bleached, winter	gal.	1.35	— 1.37
Neatsfoot, 20 deg.	gal.	3.44	— 3.46
30 deg., cold test	gal	2.99	— 3.01
40 deg., cold test	gal.	2.94	— 2.96
Dark	gal.	1.49	— 1.55
Prime	gal.	1.95	— 2.00
Red, (Crude oleic acid)	lb.	.16	— .16½
Saponified	lb.	.16¼	— .17¼
Stearic, single pressed	lb.	.21	— .22
Double pressed	lb.	.22	— .23

VEGETABLE OILS

*Castor, No. 1, bbls.	lb.	.29	— .30
*No. 3	lb.	.28½	— .29
Cocoanut, Ceylond, bbls.		.17½	— .18½
*Ceylon, Tanks	lb.	.16½	— .16¾
Cochin, bbls.	lb.	.18¾	— .19
Tanks	lb.	.16¼	— .17½
*Corn, crude, bbls.	lb.	.17¾	— .18
Refined, barrels		21.47	—21.67
*Cottonseed, crude, f.o.b. mills in tanks		—	— .17½
*Summer, yellow, prime	lb.	.21	— .21½
*White	gal.	—	— —
*Winter, Yellow	gal.	—	— —
Linseed, raw car lots	gal.	1.85	— 1.88
5-bbl. lots	gal.	1.88	— 1.90
*Olive, denatured	gal.	4.25	— 4.50
Foots	lb.	.42	— .44½
*Palm Lagos, casks	lb.	—	— .45
*Niger	lb.	—	— —
*Palm Kernel, domestic	lb.	.18	— .18¾
Peanut, edible	lb.	.20	— .21
†Crude f. o. b. mills	gal.	1.36½	— 1.38
*Pine, white steam	gal.	—	— —
*Sesame, domestic	gal.	—	— —
*Soya Bean, Manchurian	lb.	.18⅛	— 18¾

GREASES, LARDS, TALLOWS
(New York Markets)

Grease, white	lb.	17½	— 18¼
Yellow	lb.	.16	— .16½
House	lb.	.15¾	— .16¼
Brown	lb.	.15	— .15½
Lard, City	lb.	.26	— .26½
Compound	lb.	.22½	— .23¼
Stearine, lard	lb.	.28½	— .29
Oleo		.20½	— .20¾
Tallow, edible	lb.	—	— .18½
City prime	lb.	17.	— .17¼
Choice Country	lb.	.18	— .17½

(Western Markets)

Tallow, edible	lb.	.19¼	— .19½
City Fancy	lb.	—	— .19
Prime Packers	lb.	18½	— .18¾
Grease, Choice White	lb.	.18½	— .18¾
"A" White	lb.	.17¼	— .17¾
"B" White	lb.	.17	— .17¼
Yellow	lb.	.16¼	— .16½
Brown	lb.	.14½	— .15
Bone	lb.	.12	— .13
House	lb.	.15	— .15¼
Stearine, prime oleo	lb.	20½	— .20¾
Lard, city steam	lb.	.26	— .26½

*Nominal. †Buyers' Tanks.

The Gordon-Van Tine Company has announced the closing of a contract for building a complete city for the Grasselli Chemical Company at their plant at Grasselli, N. J., which is just outside the City of Newark. The new project calls for the erection of about 100 homes with stores and a community center. It includes not only all designing, superintendence, labor and furnishing of materials, but also a sales plan to sell the homes to the workmen. Work is to be started at once and the completion of the job is expected within five months.

The Takamine Laboratories of Clifton, N. J., have been the object of attack lately by property owners who have filed complaints with the Board of Health against the odors of chemicals which they assert arise from the plant. An official of the plant said the complaints were due to selfish motives on the part of "profiteering land owners." Pipes have been laid from the chemical vats into a nearby brook in order to destroy the odors. The Takamine Laboratories are engaged in the manufacture of chemicals for the Government. The apparatus and machinery are valued at $160,000.

The National Aniline and Chemical Company and E. C. Klipstein & Sons Company, of New York, have filed applications with the Federal Trade Commission for licenses to use patents enemy owned or controlled. The first-named seeks a dye patent, the latter wants two tanning process patents.

Imports and Exports of Drugs and Chemicals, Dyestuffs, Etc.

Imports from August 3 to August 10—Exports for month of June.

Owing to the strict regulations of the Treasury Department forbidding the publication of the names of importers receiving consignments and the names of ports of shipment, this feature of the service is omitted by DRUG AND CHEMICAL MARKETS during the period of the war. Subscribers interested in any special product will be assisted in locating supplies if they will communicate with the Editor.

Imports

ARSENIC—
55,595 pounds

BARK—
13,500 pounds mangrove
8,000 pounds orange
74,791 pounds cinchona

BEANS—
212 bushels castor
5 bushels castor

BISMUTH—
578 pounds

DYES AND DYESTUFFS—
3,023 pounds
13,008 pounds

DYE WOODS—
382 tons

ESSENTIAL OIL—
500 pounds

FLOWERS—
59,500 pounds insect

IODINE—
17,150 pounds

IRON OXIDE—
10,000 pounds

LACTARENE—
5,583 pounds

LEAVES—
19,000 pounds senna
5,570 pounds savory
16,200 pounds sage
3,450 pounds henna

MANNA—
1,650 pounds
2,900 pounds

POTASSIUM CARBONATE—
19,800 pounds

QUININE—
48,888 ounces

QUEBRACHO—
471,719 pounds

ROOTS—
20,675 pounds licorice
50,800 pounds licorice
26,200 pounds licorice
2,000 pounds jalap
9,491 pounds ginger
13,900 pounds ginger

SEED—
1,550 pounds cardamom

SODIUM NITRATE—
28,303 tons

SHELLAC—
807,007 pounds

SPONGES—
15,500 pounds

SPICES—
1,370 pounds cloves
16,900 pounds nutmegs
10,000 pounds nutmegs
35,200 pounds nutmegs
15,600 pounds nutmegs
2,098 pounds pepper

SUMAC—
2,420 pounds

TARTAR, CRUDE—
24,200 pounds
21,000 pounds

Exports

ACID, CARBOLIC—
25 pounds, Barbados
55 pounds, Mexico
100 pounds, Salvador
130 pounds, Panama
50 pounds, Guatemala

ACID, NITRIC—
1,060 pounds, Mexico
12 pounds, Costa Rica

ACID, OXALIC—
1,470 pounds, Brazil

ACID, SULPHURIC—
1,099 pounds, San Domingo
63 pounds, British W. Indies
145 pounds, Trinidad
1,036 pounds, France
700 pounds, Costa Rica

ALCOHOL—
50 gallons, Colombia

BEANS, VANILLA—
189 pounds, Chile
589 pounds, Canada

CACAO—
191,657 pounds, Mexico
183,000 pounds, Cuba
227,248 pounds, Argentina
2,820 pounds, Brazil
14,420 pounds, Australia

CALCIUM CARBIDE—
9,240 pounds, Panama
400 pounds, Nicaragua
4,120 pounds, Costa Rica
944 pounds, Bermuda

CAMPHOR, REFINED—
3,440 pounds, Spain

CASSIA—
7,255 pounds, Venezuela
270 pounds, Dutch Guiana
60 pounds, Brazil
1,625 pounds, Argentina
3,370 pounds, San Domingo
6,067 pounds, Hayti

COPPER SULPHATE—
286 pounds, Cuba
100 pounds, British W. Indies
302 pounds, Chile

GLYCERIN—
50 pounds, Newfoundland
150 pounds, Salvador
100 pounds, Portugal
150 pounds, Panama

OPIUM—
609 pounds, Cuba

PARAFFIN WAX, REFINED—
57,222 pounds, Australia
40,000 pounds, Salvador
28,100 pounds, Honduras
112,000 pounds, Ireland

PEPPER—
16,300 pounds, Uruguay
78,225 pounds, Brazil
10,400 pounds, Argentina
17,891 pounds, Hayti
6,091 pounds, Mexico
7,320 pounds, Colombia
5,744 pounds, Venezuela

SHELLAC—
100 pounds, Cuba

SODA ASH—
300 pounds, Jamaica
34,250 pounds, Panama
12,000 pounds, Nicaragua
2,400 pounds, Costa Rica

SODA, CAUSTIC—
12,370 pounds, Panama
120 pounds, Guatemala
48 pounds, Virgin Islands

SODA, SAL—
2,130 pounds, Bolivia

VEGETABLE WAX—
38,780 pounds, Australia

ZINC OXIDE—
50 pounds, Trinidad
4,375 pounds, Jamaica
101 pounds, Salvador
1,172 pounds, Panama

Swiss Dyestuff Outlook

Dr. H. Fierz, in a paper read before the Swiss Chemical Society, discussed the possibility of making the Swiss coal-tar dye industry entirely independent of foreign countries, in respect of raw materials and intermediates.

The world production of coal-tar dyes before the war was valued at not far short of £2,000,000, of which about 7.5 per cent. was produced by Switzerland. Switzerland, however, had to obtain three-fourths of her supplies of intermediates from Germany, so that her net contribution to the world production was only 2 per cent. This great dependence on Germany was very acutely felt soon after the outbreak of war, and in October, 1914, more than two-thirds of the Swiss dye factories were in a precarious condition.

Since then, however, conditions have somewhat improved, but it would be a great mistake to infer from the highly satisfactory position of the Basle dye factories, for example, that all the intermediates required are now being produced in Switzerland. As a matter of fact, only a small quantity is being produced, and at a price which could not possibly meet outside competition in normal times. The manufacture of intermediates is only profitable on a large scale, and this, of course, means large supplies of raw material.

Since Switzerland must obtain most of her coal from abroad she can never occupy a high position among the dye producing nations. Dr. Fierz, however, thinks that if Switzerland made the best possible use of what coal she does get at the gas works, for instance, she should be able to obtain all the intermediates required. The Swiss gas works produce every year from 5,000,000 tons of coal (25 per cent of the total imports) about 30,000 tons of gas tar. This amount of gas tar should yield 1,500 tons of naphthalene, 450 tons of benzol and toluol, 75 tons of phenol and cresol, and 30 tons of anthracene. These quantities should be sufficient for the Swiss dye industry, except in the case of phenol and anthracene, of which larger quantities would be required. Larger quantities of the imported coal would, therefore, have to be coked, and this should be easily possible without compromising the supply of fuel for domestic and industrial purposes.

As regards the financial aspect, it would, of course, be impossible with the present high cost of coal, etc., to produce at pre-war prices, but strenuous efforts will be made, by co-operating with the more important Swiss dye-works, to produce the intermediates on the largest scale possible, with a view to getting down as near as possible to pre-war costs. For this purpose it is, of course, necessary that sulphuric acid and caustic soda should be cheaply available. The new suphuric acid and soda works at Zurzach will help materially in this direction.

Foreign Trade Opportunities

The Department of Commerce, Washington, D. C., has received the following inquiries for drugs, chemicals and accessories. Reserved addresses may be obtained from the Bureau and its district and cooperative offices. Request for each opportunity should be on a separate sheet and state opportunity number. The Bureau does not furnish credit ratings or assume responsibility as to the standing of foreign inquirers; the usual precautions should be taken in all cases.

27258—A firm of general commission merchants in Spain desires to secure the agency for sulphate of ammonia. Credit terms of from 60 to 90 days are preferred. Correspondence may be in English. References.

27282—A company in Spain would like to secure agencies for the sale of whale oil, lubricating oils, oils for the woolen industry, and various grades of animal oils. Credit terms of from 60 to 90 days are preferred. Correspondence may be in English. References.

27283—A firm in the French West Indies desires to purchase or secure an agency for the sale of fertilizers, apparatus for distilling rum, chemicals, and all kinds of supplies required on a sugar plantation. A member of the firm is at present in the United States and will remain in this country until August 14, during which time interested firms may communicate with him. He wishes to receive catalogues, prices, and full information. Quotations should be made f.o.b. New York. Correspondence may be in English. References.

27291—A man in France wishes to purchase and secure an agency for the sale of toilet articles, soap, perfumery, brushes, hair lotions, etc. Correspondence should be in French. References.

27296—A man who has just returned from active service in Europe and who will be in the United States for a short time desires to secure agencies for the sale of drugs and chemicals, paints and varnishes, in Australia. He intends to leave for Australia as soon as suitable business connections are made. Reference.

New Incorporations

The National Spice Co., Brooklyn, N. Y., capital $6,000. H. Echen, I. Blidstein, J. Albert, 524 Saratoga Ave., Brooklyn, N. Y.

American Pigment Co., Dover, Del., capital $250,000. M. E. Dorsey, Ferris Giles, Charles W. Martin, all of Wilmington, Del.

Wood Bros., Varnish Co., Manhattan, capital $20,00. W. D., L. H., and L. H. Wood, Jr., 33 Wythe Ave., Brooklyn, N. Y.

New York Cocónut Co., Manhattan, capital $25,000. W. T. Shay, J. F. Eastmond, J. A. Murphy, 82 Beaver Street, New York City.

Handy Oil Co., Inc., Buffalo, N. Y. capital $75,000. Arthur E. Francis, Leon W. du Finn and William O. Shields.

The Independent Producers' Co., Cincinnati, O., capital $100,000. To handle the alcohol output of seven companies, including the Union Distilling Co., of Cincinnati. Geo. F. Dieterle, H. W. Beggs and E. W. Wilson.

French Quicksilver Mining Co., Dover, Del., capital $1,000,000. C. L. Rimlinger, F. A. Armstrong, S. E. Dill, all of Wilmington, Del.

Eastern Dyeing Corporation, Manhattan, capital $10,000. O. H. Shugard, S. L. Snyder, A. Arfstorn, 321 East 49th Street, New York City.

Commercial Oxo-Hydrogen Co., Dover, Del., capital $200,000. C. L. Rimlinger, S. E. Dill, F. A. Armstrong, all of Wilmington, Del.

Pyrotol Chemical Co., Beaumont, Tex., capital $35,000. E. J. Goodier, A. J. Szafir, Sol. E. Gordon.

The Economy Chemical Co., Lansing, Mich., capital not named. To manufacture aluminum solder, fireless fumigators, etc., E. F. Mix, R. D. Gifford, C. E. Ferris.

Capital Increases—Liberty Wood Product Co., Manhattan; from $3,000 to $50,000.

Authorizations—S. S. Stafford, Delaware. No capital named. Paints and varnishes. W. S. Stafford, representative.

New Designations—Pitcairn Varnish Co., New Jersey. New representative, J. W. Mowrey, Woolworth Building, New York City.

A recent executive order from the White House, stating that chemists may be employed in the Research Division, Chemical Warfare Service, without reference to the requirements of the civil service act, testifies to the importance of the chemical war work and the gas experimentation now in progress and to the great need which there is for persons qualified in this line of work.

Want Ads

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Patents and Trade Marks

PATENTS

Granted July 9, 1918

1,271,576—Martin H. Ittner, Jersey City, N. J. Hydrogenation of unsaturated bodies.

1,271,578—Frederick M. G. Johnson, Montreal, Quebec, Canada. Method of separating nitro compounds from liquids.

1,271,611—Paul Pickl, Chicago, Ill., assignor to Emma Pickl. Method of producing hydrogen peroxid.

1,271,633—Edward C. Walker, 3d, Brookline, Mass. Method of electrolytic production of perchloric acid.

1,271,652—Harry T. Bellamy, Chicago, Ill., assignor to Western Electric Company, Inc., New York, N. Y. Method of making colored glass.

1,271,654—Hilding O. V. Bergstrom, Stockholm, Sweden. Method of distilling liquid mixtures or solutions.

1,271,713—Otis Hutchins, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y. Method for the production of silicon tetrachloride.

1,271,724—Frederick H. Knapp, Roland Park, and Haywood G. Dewey, Westminister, Md. Labeling machine.

1,271,790—Walter O. Snelling, Pittsburgh, Pa. Photochemical apparatus.

1,271,846—Hans Buchtala, Gratz, Austria, assignor to Dr. Bayer es Tarsa, a firm comprising Dezso Bayer and Rudolph Braun de Belatin, Budapest, Hungary Process of producing mercury preparations for therapeutic purposes.

1,271,914—Alfred Krafft, Honolulu, Hawaii. Method of treating raw sugar-juices.

1,271,944—Anders Anderson Rosengren, Malmo, Sweden. Machine for the capsuling of bottles.

1,271,960—Tametaro Tada, Tokushima Ken, Japan. Process for preparing gelatin.

1,271,989—George A. Anderson, Worcester, Mass., assignor of one-fourth to Eskil B. Renblom, Springfield, Mass. Labeling machine.

1,272,181—Carlo Andreucci, Rome, Italy. Production of nitrogen from the air.

1,272,286—William H. Manns, Waynesboro, Pa., assignor to Frick Company. Ammonia-condenser for ice machines.

1,272,346—Frederick L. Jefferies and William Spain, Riverside, Ill., assignors to Corn Products Refining Company. Apparatus for drying bottles.

TRADE-MARKS

Published July 9, 1918

103,067—Pep Pharmacal Company, Kansas City, Mo. Medicinal compound in the form of pills for loss of appetite, nervousness, rheumatism, etc.

103,997—Sansby Brothers, St. Paul, Minn. Medicinal compound in pill or tablet form for internal use in the treatment of various human ailments.

104,410—Oscar Korn, Detroit, Mich. A laxative.

105,779—Henri Romognino, Levallois-Perret, Paris, France, Antiseptics, disinfectants, and germicides.

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Offers must be presented in the Office of the Secretary of the Council of Public Works of the Nation, in the City of Buenos Aires, before 3.30 p. m., on the 8th day of November next, on which day and hour they will be opened in the presence of the interested parties who may wish to attend on that occasion.

Buenos Aires, 4th June, 1918.

L. CELASCO,
Pro-Secretary.

República Argentina
Ciudad de Buenos Aires
Obras Sanitarias de la Nación

Construcción de una Fábrica de Acido Sulfúrico.

Llámase a licitación para la construcción de una fábrica de ácido sulfúrico de acuerdo con el pliego de condiciones que los interesados podrán consultar en el Consulado General de la República Argentina en la ciudad de Nueva York, 17 Battery Place, Room 227, todos los dias hábiles de 10 a 4 p. m.

Las propuestas deberán presentarse en la Secretaria del Directorio de las Obras Sanitarias de la Nación, en la ciudad de Buenos Aires, Capital de la República Argentina, antes de las 3 y ½ p. m., del dia 8 de Noviembre próximo, fecha y hora en que serán abiertas, en presencia de los interesados que concurran al acto.

Buenos Aires, 4 de Junio de 1918.

L. CELASCO,
Prosecretario.

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